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ABSTRACT

This report describes programs and services available to language-minority limited-English-proficient (LM/LEP) students through Chapter 1 or special programs designed for these students. Data address three aspects of the relationship between Chapter 1 and LM/LEP students: (1) Chapter 1's possible provision of English language services in place of non-Chapter 1 LM/LEP programs; (2) problems in selecting LM/LEP students for Chapter 1 services; and (3) the possible conversion of Chapter 1 compensatory education programs into language acquisition programs when LM/LEP students participate. Data suggest that Chapter 1 does not replace special programs for LM/LEP students in the schools. Most districts report that their Chapter 1 selection policies are the same for English proficient and LM/LEP students. Eligible populations for Chapter 1 and special LM/LEP programs often overlap, thus complicating the task of determining which students belong in which program. The role of Chapter 1 English-as-a-Second-Language (ESL) programs in addressing the needs of LM/LEP students raises questions concerning the extent to which these programs substitute for language assistance services for LM/LEP students that are otherwise required by law. Questions also arise over the degree to which compensatory education needs of LM/LEP students can be met in a Chapter 1 ESL program. Survey and study descriptions and support tables for citations are appended. (RH)

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Chapter 1 Services to Language-Minority Limited-English-Proficient Students: A Substudy of the National Assessment of Chapter 1

Elaine Carlson
E. William Strang

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Elaine Carlson
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This research was conducted under Contract #400-85-1008. The opinions expressed here do not necessarily reflect those of the Department of Education.

PREFACE

The National Assessment of Chapter 1 was mandated by Congress in December, 1983. The mandate, included in the Technical Amendments to the Education Consolidation and Improvement Act (ECIA) of 1981, required the National Institute of Education (NIE)[1] to conduct independent studies and analyses, and to report the findings to Congress. The final report, entitled *The Current Operation of the Chapter 1 Program (1987)*, addresses a broad range of topics regarding Chapter 1 programs nationwide, and presents data from surveys and case study interviews in school districts and states conducted specifically for the National Assessment. As part of that effort, data were also gathered on programs for language-minority limited-English-proficient (LM/LEP) students, through surveys of district administrators, school principals, and teachers of LM/LEP students as well as through case study interviews.

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[1]On October 1, 1985, NIE was reorganized into the Office of Educational Research and Improvement (OERI) within the U.S. Department of Education (ED).

EXECUTIVE SUMMARY

This report describes the programs and services available for language-minority limited-English-proficient (LM/LEP) students through Chapter 1 or special programs designed specifically for these students. Data from the National Assessment of Chapter 1 and other sources are used to address three aspects of the relationship between Chapter 1 and LM/LEP students: (1) Chapter 1's possible provision of English language services in place of non-Chapter 1 LM/LEP programs, (2) problems in selecting LM/LEP students for Chapter 1 services, and (3) the possible conversion of Chapter 1 compensatory education programs into language acquisition programs when LM/LEP students participate. While this report does not fully answer these concerns, it brings together information to inform their discussion and sets out areas where additional research is needed.

FEDERAL POLICY ISSUES

Many LM/LEP students face the dual disadvantages of being low achieving as well as deficient in English language skills. These dual disadvantages raise policy dilemmas when decisions are made whether to serve these students through Chapter 1. One dilemma concerns when and how LM/LEP students should be served by Chapter 1: on one hand, Chapter 1 monies may not be used to provide services which are otherwise required by law, and *Lau v. Nichols* states that districts must supply special services to address the language deficiencies of LM/LEP students; on the other hand, nondiscrimination requirements prohibit excluding LM/LEP students from Chapter 1. Consequently, education officials are obliged to include eligible LM/LEP students in Chapter 1 and to base that eligibility on measures of achievement as opposed to English language proficiency. This leads to a second dilemma: isolating students' low achievement from their English language proficiency may not be possible with current assessment instruments.

It should be noted that the issues surrounding Chapter 1 and services for LM/LEP pupils cannot all be reduced to research questions, and some issues that do translate into empirical questions lie beyond the data in this report. In addition, most of the data available describe Chapter 1 and non-Chapter 1 services for LM/LEP students that are offered by schools; few data are available that describe the services LM/LEP students receive. Nevertheless, partial answers to questions in important issue areas are possible, as summarized below.

Do Chapter 1 programs replace other English language acquisition programs for LM/LEP students?

The data presented in this report suggest that Chapter 1 does not replace special programs (e.g., Title VII) for LM/LEP students in the schools. However, a small percentage of Chapter 1 schools report Chapter 1 ESL programs as the only special service for LM/LEP students. And nearly one out of every five public elementary schools with Chapter 1 report no special programs are available to meet the special needs of enrolled LM/LEP students.

- About one-third of Chapter 1 public elementary schools enroll LM/LEP students, and 82 percent of these schools provide some special language services, including Chapter 1 ESL.

- Fifty percent of Chapter 1 schools with LM/LEP students offer special language services funded from non-Chapter 1 sources, another 10 percent offer only Chapter 1 ESL, and 22 percent offer both Chapter 1 ESL and non-Chapter 1 special language services.

How do districts select LM/LEP students for Chapter 1? Do Chapter 1 selection procedures distinguish between students who are educationally disadvantaged and those who are only limited English proficient?

Districts are required to select LM/LEP and English proficient students for Chapter 1 on the same basis, and the majority of districts report their Chapter 1 selection policies are the same for English proficient and LM/LEP students. The eligible populations for Chapter 1 and special LM/LEP programs often overlap, however, complicating the task of determining which students belong in which program(s). Technical problems involving assessment instruments affect practitioners' ability to isolate difficulties in the use of English from educational disadvantages.

- The most commonly used criteria for selecting both English proficient and LM/LEP students for Chapter 1 participation are standardized achievement test scores and teacher judgments.

- Approximately 13 percent of districts either automatically include or exclude LM/LEP students when deciding who will receive Chapter 1 services. Another 34 percent of districts report using different procedures for selecting LM/LEP and English proficient students.

- English language proficiency tests are the primary means of selecting students for non-Chapter 1 special LM/LEP programs; 91 percent of teachers who serve in non-Chapter 1 special programs for LM/LEP students report using English language proficiency tests for student selection. Further, principals in 29 percent of Chapter 1 schools with LM/LEP students report using such tests for Chapter 1 selection.

Is Chapter 1 ESL different from regular Chapter 1 compensatory education and from non-Chapter 1 special LM/LEP programs?

The role of Chapter 1 ESL programs in addressing the needs of LM/LEP students raises questions at two levels. One level concerns the extent to which these programs substitute for language assistance services for LM/LEP students that are otherwise required law. At another level, questions arise over whether the compensatory education needs of LM/LEP students can be met in a Chapter 1 ESL program.

Chapter 1 ESL services differ from those offered by regular Chapter 1 and non-Chapter 1 special LM/LEP programs on several instructional dimensions:

- Special LM/LEP services not funded by Chapter 1 involve more minutes of instruction than Chapter 1 ESL, and, in turn, Chapter 1 ESL programs offer more minutes of instruction than regular Chapter 1 programs.

- Instructional group sizes are slightly larger in non-Chapter 1 special LM/LEP programs than they are in Chapter 1 ESL or regular Chapter 1 programs.

- Instructors providing non-Chapter 1 special LM/LEP services are more likely than instructors of Chapter 1 ESL to have specialist credentials in ESL or bilingual education.

- Instructors providing non-Chapter 1 special LM/LEP services are more likely than instructors of Chapter 1 ESL to use languages other than English for instruction.

- Special LM/LEP services that are not funded by Chapter 1 are generally provided as replacement classes; pull-outs are the dominant approach used for regular Chapter 1 services, and Chapter 1 ESL programs are divided evenly between replacement programs in some schools and in-class programs in others.

Most Chapter 1 elementary schools use Chapter 1 ESL services as a supplement to regular or bilingual forms of instruction, but some may use it as an alternative to those forms of instruction. In some schools Chapter 1 ESL may add extra instruction for students already in a special LM/LEP classroom, while in others it may provide help to LM/LEP students enrolled in regular education classes. The role of Chapter 1 ESL and non-Chapter 1 LM/LEP services in meeting the needs of LM/LEP students may depend in part on the district and school-level resources available for such students as well as the educational philosophy prevalent in the district. Unfortunately, available data do not allow us to address these considerations.

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INTRODUCTION

This report describes the programs and services available for language-minority limited-English-proficient (LM/LEP) students through Chapter 1 as well as special federal, state, and local programs designed specifically for these students.[1] While separate goals and objectives characterize special LM/LEP and Chapter 1 programs, both serve LM/LEP students.

LM/LEP students, by definition, have a significant disadvantage in the public schools: they lack a mastery of English. In addition, many of these students face educational deprivation resulting from poverty. In fact, as a group LM/LEP students tend to be poor and educationally deprived as well as having limited English proficiency. The federal government provides funds through Chapter 1 of the Education Consolidation and ...provement Act to compensate for the negative effects of poverty on educational achievement. State, local, and federal special programs for LM/LEP students are designed to address the educational needs of the limited English proficient. It is frequently difficult to determine if a LM/LEP student is educationally deprived, or only seems to be educationally deprived due to an English language deficiency. This report addresses several issues resulting from this overlap that relate to levels of participation, selection criteria, and service characteristics of special LM/LEP and Chapter 1 programs.

DATA SOURCES

The information presented in this report is based on multiple data sources but primarily emphasizes those commissioned by the National Assessment of Chapter 1.

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[1]The term, language-minority limited-English-proficient, describes students who experience difficulty in the use of the English language either in speaking, reading, or writing due to their reliance on or exposure to a language other than English in their home or family. The term is intended to differentiate such students from students who experience difficulty in the mastery of language skills but who come from an English-speaking background.

These sources include two national surveys that collected information from principals, teachers, and district administrators, and several specially focused case studies that examined selected aspects of Chapter 1 program administration and operation. This report also draws on other available data, including a national longitudinal study conducted for the Office of Bilingual Education and Minority Languages Affairs, and data from the Chapter 1 Evaluation and Reporting System. Appendix A describes the primary data sources in more detail. The following surveys and studies conducted for the National Assessment provide the basic data for this report:

The School Survey--A national survey of principals and teachers about Chapter 1 and non-Chapter 1 schools, students, and services.

The District Survey--A national survey of district Chapter 1 coordinators about district implementation of Chapter 1 and other special instructional programs.

The Targeting Study--A detailed study conducted in 30 districts of how districts select Chapter 1 schools and students and the effects of these procedures (Wood, Gabriel, Marder, Gamel, and Davis, 1986).

The Resource Allocation Study--A study of how districts allocate resources among schools and the resulting resource distributions (Goertz, 1987).

The Program Design Study--A study describing how districts and schools make program design decisions for Chapter 1 (Knapp, Turnbull, Blakely, Jay, Marks, and Shields, 1986).

LIMITATIONS OF THE DATA

The majority of the data available for this report were collected at the school or district level, rather than at the student level. Therefore, we could not draw conclusions about the types of services students receive, but only about the types of services schools and districts offer. Reports about the instruction provided to students are based primarily on teachers' and principals' assessments.

In addition, special LM/LEP services are generally funded through state and locally developed programs. Selection criteria, funding levels, and program goals vary from state to state and district to district. Information about these state and district

practices was not collected, and therefore was unavailable for the purposes of this study.

SAMPLE ESTIMATES AND STANDARD ERRORS

The numbers used in this report are estimates and are subject to some imprecision due to either a small number of observations or extreme variability among observations of the schools and teachers sampled. This sampling error, expressed statistically as a standard error for each estimate, is often higher than desired. For this reason, some estimates may appear noteworthy but may be too imprecise to place confidence in their accuracy. We have taken standard errors into account when discussing patterns and results in the text of this report. However, to allow the reader to judge the precision of an estimate, standard errors are included in supporting tables in Appendix B for all estimates developed for this report. Standard errors are not available for data taken directly from other reports.

NOTES ON TERMINOLOGY

This study examines and compares Chapter 1 ESL programs and non-Chapter 1-funded programs for language minority-limited English proficient (LM/LEP) students as well as "regular" Chapter 1 programs. Chapter 1 programs for LM/LEP students are generally referred to as "Chapter 1 ESL" (English as a second language) programs, reflecting the form such programs often take (Guthrie *et al*, 1986). Chapter 1 does provide other services to LM/LEP students, such as remedial mathematics. Available data, however, do not allow the evaluation of these other Chapter 1 services for LM/LEP students. The reader should keep in mind that findings on ESL services funded by Chapter 1 refer only to ESL services and are not appropriate if estimates of all Chapter 1 services for LM/LEP students are needed.

Non-Chapter 1 programs for LM/LEP students are termed "special LM/LEP services," which appropriately implies a wide range of programs and activities. The "regular" Chapter 1 program, which may serve some LM/LEP students but is designed for compensatory education, is labeled as such.

ORGANIZATION OF THE REPORT

This report is divided into five chapters. The first describes LM/LEP students and the policy issues surrounding Chapter 1 services for them. The second chapter describes the programs available to serve LM/LEP students, participation levels for these programs, and school characteristics. The next chapter focuses on policies and procedures for selecting students for the programs. Chapter 4 compares the ESL services offered to LM/LEP students through the Chapter 1 program and services offered through other programs. A brief summary of findings and their implications is presented in the final chapter.

CHAPTER 1

LM/LEP STUDENTS: CHILDREN WITH MULTIPLE NEEDS

What does it mean to be limited English proficient? According to the Bilingual Education Act, individuals who are limited English proficient are

> (A) individuals who were not born in the United States or whose native language is a language other than English;
>
> (B) individuals who come from environments where a language other than English is dominant; and
>
> (C) individuals who are American Indian and Alaska Natives and who come from environments where a language other than English has had a significant impact on their level of English language proficiency;
>
> and who, by reason thereof, have sufficient difficulty speaking, reading, writing, or understanding the English language to deny such individuals the opportunity to learn successfully in classrooms where the language of instruction is English or to participate fully in our society (Section 7003 (a)(1)(A) of ESEA as amended by P.L. 100-297).

LM/LEP students, as a group, are more likely than their English-proficient peers to suffer from educational deprivation and, therefore, be eligible for Chapter 1 services. Their teachers report that first and third grade LM/LEP students perform below grade level not only in mathematics and English skills, but also in native language skills. Further, a national evaluation of the effectiveness of services for LM/LEP students found that LM/LEP students in first grade are close to national averages for age, but third grade LM/LEP students are four-to-five months older than their English proficient classmates. The increase in age difference from the first to the third grade may reflect one of two patterns: (1) LM/LEP students are being held back in grades 1 through 3; or (2) those LM/LEP students entering the school system in higher grades have insufficient educational backgrounds to be placed with students of the same age (Young, 1984).

LM/LEP students also tend to be poorer than English-proficient students. One common measure of relative poverty is eligibility for free or reduced price lunches: 91 percent of LM/LEP students are eligible for these subsidies, compared to 47 percent of all students in those same schools (Young, 1984).

LEGISLATIVE HISTORY

Chapter 1, formerly Title I of the Elementary and Secondary Education Act (ESEA), serves almost five million school-aged children, or one out of every nine students enrolled in U.S. elementary and secondary schools. At $3.9 billion in 1987, the program is the federal government's largest investment in elementary and secondary education. The program reaches virtually every school district in the nation. Enacted in 1981 and amended in 1983, Chapter 1 retained the basic purpose of Title I, which is "to provide financial assistance to State and local education agencies to meet the needs of educationally deprived children" (Section 552) (Birman et al., 1987). In 1988, Chapter 1 was replaced by the Augustus F. Hawkins-Robert T. Stafford Elementary and Secondary School Improvement Amendments of 1988 (P.L. 100-297).

Direct federal involvement in the education of LM/LEP students began with the enactment of the Bilingual Education Act in 1968. 1974 marked an important shift in federal emphasis toward pupils who were LM/LEP. In that year, Congress authorized an expansion of Title VII (the Bilingual Education Act) budget levels to $50 million from an initial level of $7.5 million in 1968-69, the first year of Title VII funding. In addition, Congress dropped the poverty provisions for eligibility and included requirements for native-language instruction. By 1978, Congress had clarified the limits of native-language instruction as being the point where children become competent in English and expanded the population of students eligible for Title VII by establishing "limited English proficiency," a term which includes reading and writing, as well as English-speaking proficiency, as the standard (Crawford, 1987).

Also in 1974, the Supreme Court decided in *Lau v. Nichols* that school districts must provide services to enable students whose primary language is other than English to participate equally in the educational program. The Court did not require native language instruction; rather it ruled that teaching English was one option and instruction in students' native languages was another. The Court based its ruling on Title VI of the Civil Rights Act prohibiting discrimination on the basis of national origin. The *Lau* decision, coupled with Office for Civil Rights enforcement, has apparently encouraged more districts to provide special English language instructional services to LM/LEP students than would have occurred because of Title VII alone (Crawford, 1987).

FEDERAL POLICY ISSUES

The dual problems characteristic of LM/LEP students -- a lack of English language proficiency and underachievement in academic subjects -- challenge federal policies that are designed to address each problem through separate funding and program channels as well as at different levels of governance. At the heart of policymakers' concerns about the interaction of Chapter 1 and special LM/LEP programs lies the question of whether these programs are being used for their intended purposes.

Several dilemmas have arisen from Chapter 1 requirements that are intended to protect the compensatory focus of the program while complying with federal prohibitions against discriminating solely on the basis of national origin or English language proficiency.

Specifically, Chapter 1 requires that Chapter 1 monies may not be used to provide services which are otherwise required by law, commonly referred to as the "supplement, not supplant" provision. Because the Supreme Court, in its 1974 *Lau v. Nichols* decision, ruled that districts must supply special services for LM/LEP students to allow

them to participate equally in the educational program, it follows that Chapter 1 compensatory education services may not be used to replace these legally mandated language services.

At the same time, however, LM/LEP students may not be denied access to Chapter 1 services simply because of their limited-English proficiency status. According to the 1983 Chapter 1 Non-Regulatory Guidance, which is not legally binding on school districts, LM/LEP students may be included in Chapter 1 if:

- The LEA designs its Chapter 1 project to address special needs resulting from educational deprivation, not needs relating solely to a child having limited English-speaking proficiency;
- The LEA sets overall project objectives that do not distinguish between participants of limited English-speaking proficiency and other participants;
- Through the use of uniform criteria, the LEA selects children for participation on the basis of educational deprivation, not on the basis of limited English-speaking proficiency; and
- The LEA provides Chapter 1 services taking into account the needs and abilities of individual participants but without distinguishing generally between children of limited English-speaking proficiency and other children with respect to the instruction provided. The LEAs may use Chapter 1 funds to provide staff who are bilingual and secure appropriate materials, when such staff and materials are necessary to address the educational deprivation of children to be served (U.S. Department of Education, 1983).

The Non-Regulatory Guidance and more recently the Hawkins-Stafford Elementary and Secondary School Improvement Amendments of 1988 (P.L. 100-297) state that services to LM/LEP students funded through Chapter 1 must address the needs of students resulting from educational deprivation and not language deprivation. P.L. 100-297 states:

> (d) SPECIAL RULES.-(1) Children receiving services to overcome a handicapping condition or limited English proficiency shall also be eligible to receive services under this part, if they have needs stemming from educational deprivation and not related solely to the handicapping condition or limited English proficiency. Such children shall be selected on the same basis as other children identified as eligible for and selected to receive

> services under this part. Funds under this part may not be used to provide services that are otherwise required by law to such children (Section 1014 (d)(1) of ESEA).

This section leaves several issues unresolved. First, the law provides no means to distinguish those LM/LEP students whose educational deprivation stems *solely* from limited English proficiency from other children. Second, the law does not define LM/LEP students, and state and local education agencies employ differing definitions as to what constitutes a LM/LEP student. Third, the law does not designate a means to determine what constitutes "services that are otherwise required by law." School officials are left to resolve these issues as best they can.

Policymakers are concerned that Chapter 1 may be used for language services rather than as a compensatory education program. This concern is based on the fact that districts have some discretion in developing and implementing Chapter 1 programs and on the concern that funds for compensatory education may be more readily available than funds for special LM/LEP services. It is also based on the perceptions that the LM/LEP student population is growing faster than the programs designed to address their English-language deficiencies and that, in some districts, the concentration of LM/LEP students may shift the nature of the Chapter 1 program at the expense of English-proficient, educationally disadvantaged students.

Several different programs and services are available to LM/LEP students from federal, state, and local sources. Federal programs include Title VII of the Bilingual Education Act, Refugee Assistance, Immigrant Education, Vocational Education, Chapter 1 Migrant Education, and Chapter 1 basic grants. These federal programs are often coupled with state and local programs that have been implemented where specific needs exist or in response to the *Lau* decision. However, the number of programs may be less important than their size in terms of funding, because perceptions of

inadequate funding levels may heighten local pressures to rely on Chapter 1 funds to support special assistance for LM/LEP pupils.

A number of policymakers concerned about the proper use of funds and maintaining the compensatory focus of Chapter 1 programs emphasize that Chapter 1 services should be designed to meet the needs of educationally disadvantaged students, not the special English language needs of LM/LEP students. Difficulties ensue, however, in attempting to separate these two conditions when they are present in the same student, and LM/LEP students are relatively more likely than English proficient students to be educationally deprived. To what extent can Chapter 1 services adapt to meet the dual needs of LM/LEP students? This question is particularly pertinent to Chapter 1 ESL programs which constitute a popular approach in many districts to assisting LM/LEP students through Chapter 1.

The issues surrounding Chapter 1 and services for LM/LEP pupils cannot all be reduced to research questions. In addition, some issues that translate into empirical questions lie beyond the data analyzed in this report. Nevertheless, the data gathered as part of the National Assessment of Chapter 1 on services for LM/LEP students can partially address three important questions:

- Do Chapter 1 programs replace non-Chapter 1 language acquisition programs for LM/LEP students?
- How do district and school officials select LM/LEP students for Chapter 1? Can current Chapter 1 selection procedures accurately distinguish between students who are educationally disadvantaged and those who are only limited English proficient?
- Are Chapter 1 ESL services different from regular Chapter 1 compensatory education services and from non-Chapter 1 special LM/LEP services?

The first question regarding Chapter 1's possible replacement of other LM/LEP program resources can be addressed in part by analyzing the distribution of programs across schools that enroll LM/LEP pupils. The second question regarding selection

practices can be assessed through school and district reports of selection practices and an examination of whether selection practices result in distinctly different groups of students receiving specific services. Comparisons of the instructional characteristics of each special program--characteristics such as minutes of instruction, the size of instructional groups, the model or setting used to deliver services--can provide clues to the third question regarding how the content of instruction in Chapter 1 ESL differs or resembles that in other special services for LM/LEP students.

CHAPTER 2

PROGRAMS AND SCHOOLS

Policymakers are concerned that districts may use Chapter 1 funds to serve LM/LEP students instead of educationally deprived students. The previous chapter showed that, as a group, LM/LEP students share key characteristics with educationally deprived students, namely relative poverty and low academic achievement; thus, they may qualify for Chapter 1 services regardless of their limited English proficiency. This chapter follows on that finding and shows that both Chapter 1 and special LM/LEP programs are often found in the same schools. Further, while schools offering Chapter 1 ESL are predominantly those with high levels of poverty, special LM/LEP services are also statistically overrepresented in those schools. In short, regular Chapter 1 and Chapter 1 ESL are frequently offered in schools in addition to special LM/LEP services, not instead of them.

THE NUMBER AND DISTRIBUTION OF LM/LEP STUDENTS

District-level survey data collected as part of the National Assessment of Chapter 1 produced a national estimate of 1.39 million LM/LEP students in grades K-12. This estimate is similar to the estimate of 1.36 million developed as part of the longitudinal study of bilingual education (Young, 1984). The Chapter 1 District Survey produced an estimated 530,000 LM/LEP students as the number receiving Chapter 1 ESL services.[2]

The 530,000 LM/LEP students who receive Chapter 1 ESL services account for about 12 percent of all Chapter 1 students (Gutmann and Henderson, 1987). Other information on participation levels is available from the longitudinal evaluation of the

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[2]This estimate compares fairly well with the 590,000 Chapter 1 English-for-limited-English class participants reported by states in 1983, the last year that count was required as part of the Chapter 1 state reports.

effectiveness of services for LM/LEP students. Reports from that study suggest that state and local special LM/LEP programs reach 84 percent of first grade LM/LEP students and 77 percent of third grade LM/LEP students (Table 1). Federal programs also reach as many as 47 percent of first grade LM/LEP students, and Chapter 1 serves 40 percent of third grade LM/LEP students. (Duplicated counts are possible as students may receive services from more than one program.)

LM/LEP students are not evenly distributed across districts or states. Even though LM/LEP students can be found in 33 percent of all districts and 36 percent of public elementary schools, in most of those districts and schools, no more than 2 percent of students qualify as LM/LEP. Twenty states account for over 90 percent of all LM/LEP students. In brief, the uneven distribution of LM/LEP students can create school, district, or statewide problems in providing appropriate programs; but a majority of schools, districts, and states remain relatively unaffected by the presence of such students.

SPECIAL PROGRAMS AVAILABLE IN SCHOOLS WITH LM/LEP STUDENTS

The concentration of LM/LEP students in a subset of schools in turn raises questions about the programs present in those schools to meet the needs of such students. A policy issue of major significance concerns the extent to which Chapter 1 programs constitute the only special program resources for LM/LEP students. Because Chapter 1 ESL programs are the most recognizable form in which Chapter 1 programs are tailored to address the language acquisition needs of disadvantaged LM/LEP students, it is important to examine both the proportion and characteristics of schools where these programs are the only services available for these students.

TABLE 1

Percentages of First and Third Grade LM/LEP Students Participating in Selected Federal and State/Local Programs

Program	Percentage of LM/LEP Students* Grade 1	Grade 3
Federal Programs		
Chapter 1	37%	40%
Migrant	4	3
Title VII	6	7
State/Local		
Compensatory Education	14	16
Special LM/LEP Services	84	77
Other	6	8

* The columns may add to more 100 percent because students may receive services from multiple programs.

Source: Descriptive Phase Report of the National Longitudinal Evaluation of the Effectiveness of Services for Language-Minority Limited-English-Proficient Students, December 1984.

Table reads: Thirty-seven percent of LM/LEP first graders receive Chapter 1 services.

The patterns reported in the following section suggest that a very large majority of elementary schools with LM/LEP students provide special LM/LEP programs, whether or not they have Chapter 1 programs. Nevertheless, between a quarter and a third of elementary schools with LM/LEP students do not report any special LM/LEP programs; Chapter 1 ESL programs are the only language program for LM/LEP students in 10 percent of Chapter 1 schools with LM/LEP students, while 22 percent of Chapter 1 elementary schools with LM/LEP students offer both Chapter 1 ESL and special LM/LEP programs. In general, those schools without any special programs for LM/LEP students have lower concentrations of LM/LEP students and are less poor than schools offering such programs. Schools that provide both Chapter 1 ESL and special LM/LEP programs typically have the highest concentrations of LM/LEP students, and are predominantly urban and poor when compared with schools providing just one of these programs.

The following paragraphs elaborate on the specific characteristics of elementary schools attended by LM/LEP students in terms of the various programs available for these students.

Chapter 1 and Non-Chapter 1 Schools

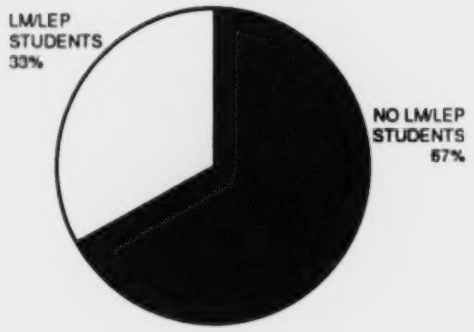
Data from the School Survey conducted for the National Assessment of Chapter 1 suggest that the presence of a Chapter 1 program does not mean the absence of a special LM/LEP program. Figure 1 presents data on the percentages of schools that enroll LM/LEP students and that offer programs for those students. Looking only at schools that enroll LM/LEP students, 72 percent of the Chapter 1 schools and 74 percent of the non-Chapter 1 schools offer special LM/LEP services. Thus, Chapter 1 and non-Chapter 1 elementary schools offer special LM/LEP programs to students in approximately the same proportion. These data, however, only reflect the presence of LM/LEP programs, not the number or percentage of students served.

FIGURE 1

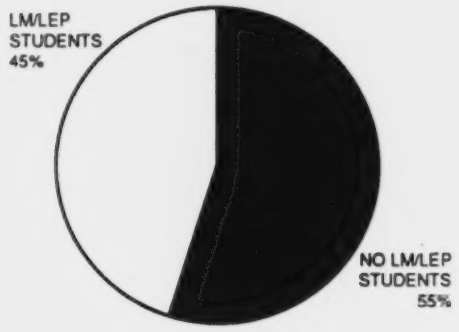
Programs For LM/LEP Students Offered By Chapter 1 And Non-Chapter 1 Public Elementary Schools

Percentage Of Schools Reporting LM/LEP students

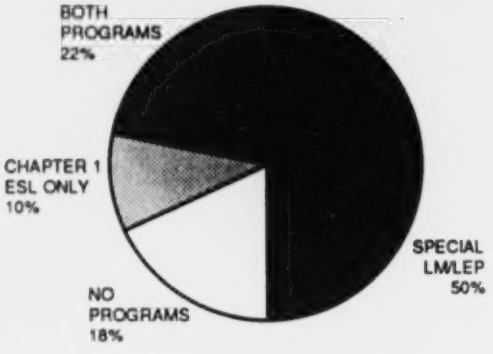
CHAPTER 1 PUBLIC ELEMENTARY SCHOOLS*

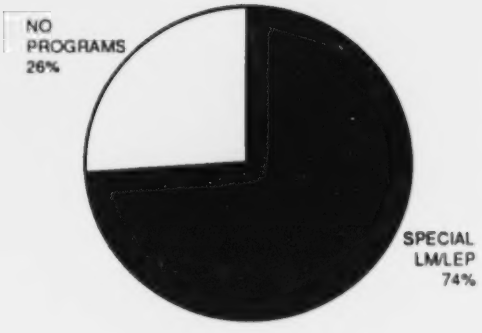


NON-CHAPTER 1 PUBLIC ELEMENTARY SCHOOLS



Percentage And Types Of LM/LEP Programs In Schools Reporting LM/LEP Students





SOURCE: School Survey conducted for the Chapter 1 National Assessment, 1985-86.

Figure reads: Of Chapter 1 public elementary schools, one third (33 percent) report LM/LEP students are enrolled; half (50 percent) of those Chapter 1 schools with LM/LEP students provide only special LM/LEP services.

* Seventy-six percent of public elementary schools offer Chapter 1 services.

Characteristics of Chapter 1 Public Elementary Schools Offering Chapter 1 ESL

Figure 1 shows that 32 percent of Chapter 1 schools with LM/LEP students offer Chapter 1 ESL. Schools offering Chapter 1 ESL programs are more likely to be urban than other schools in the nation. Data from the School Survey indicate that although schools offering Chapter 1 ESL are evenly distributed across urban, suburban, and rural locations (at about 33 percent each), they are in fact disproportionately urban in their composition; nationally, 18 percent of all public elementary schools are located in urban settings.

Schools offering Chapter 1 ESL also tend to have larger proportions of their students in poverty than other schools in the nation. Figure 2 shows that Chapter 1 ESL schools are likely to have larger proportions of poor students than schools offering regular Chapter 1 or special LM/LEP services. Specifically, 45 percent of public elementary schools offering Chapter 1 ESL are in the highest poverty quartile (i.e., have the most poor students enrolled) while only 13 percent are in the lowest quartile. If Chapter 1 ESL schools were distributed across the poverty quartiles in the same way as schools in general, 25 percent of Chapter 1 ESL schools would fall within each quartile.

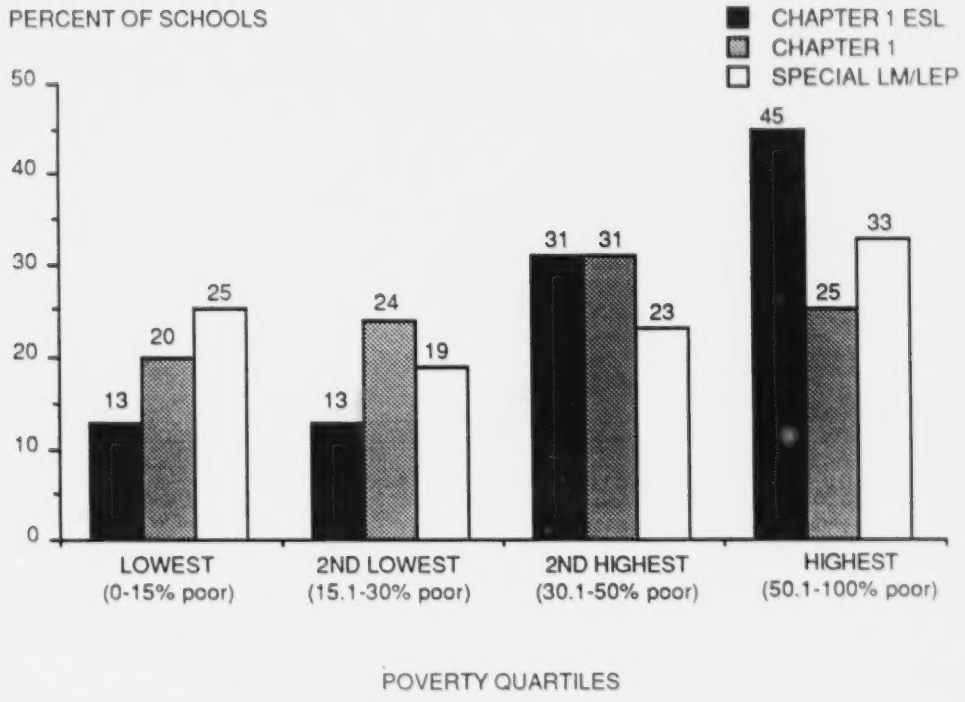
Characteristics of All Public Elementary Schools Offering Special LM/LEP Services

As previously noted, 72 percent of Chapter 1 and 74 percent of non-Chapter 1 public elementary schools with LM/LEP students offer special LM/LEP services. Schools offering special LM/LEP services are primarily urban and suburban, 33 percent and 45 percent respectively. These values compare to national estimates for all public elementary schools of 18 percent urban and 36 percent suburban.

As the percentage of LM/LEP students in a public elementary school increases, the likelihood that the school offers special LM/LEP services also increases. For

FIGURE 2

Percentages Of Public Elementary Schools Offering Special LM/LEP, Chapter 1, And Chapter 1 ESL Programs, By Poverty



SOURCE: Survey of Schools conducted for the Chapter 1 National Assessment, 1985-86.

Figure reads: Thirteen percent of public elementary schools offering Chapter 1 ESL have between 0 and 15 percent poor students enrolled, while 45 percent of public elementary schools offering Chapter 1 ESL have between 50 and 100 percent poor students enrolled. If schools offering Chapter 1 ESL were similar in this respect to all public elementary schools, 25 percent of the schools would fall into each of the four poverty quartiles.

example, data from the School Survey show that among schools with less than 10 percent LM/LEP students, only 22 percent offer special LM/LEP services. When the proportion of LM/LEP students exceeds 25 percent, the percentage of schools offering special LM/LEP services climbs to 94 percent.[3] This pattern may be partially attributable to regulations in several states that do not require special LM/LEP services in schools with fewer than 20 LM/LEP students.[4]

Schools offering special LM/LEP services are only slightly overrepresented in the poorest one-quarter of schools. Because LM/LEP students as a group are more impoverished than English proficient students, we would also expect the schools that offer special LM/LEP services to be more impoverished. However, because the median percentage of LM/LEP students in these schools is only 3 percent, their effect on the overall poverty level of the school is generally slight.[5]

Characteristics of Schools with Both Chapter 1 ESL and Special LM/LEP Services

Twenty-two percent of public elementary schools with LM/LEP students offer both Chapter 1 ESL and special LM/LEP services, according to the Chapter 1 School Survey. Overall, these schools with both programs tend to be larger, poorer, more urban, and have a higher percentage of LM/LEP students than schools with only one or the other of the programs. Specifically, the median LM/LEP enrollment in these schools is 9 percent, and the median overall enrollment is 500. Forty-five percent of these schools

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[3]About 37 percent of the schools included in the "low proportion" of LM/LEP students group have no LM/LEP students enrolled.

[4]The 1974 *Lau* remedies required formal plans for serving LM/LEP students only in schools with 20 or more LM/LEP students, although all schools were obligated to serve LM/LEP students regardless of number.

[5]When the percentage of LM/LEP students enrolled in a school increases, the relationship between the school's poverty level and the concentration of LM/LEP students becomes more pronounced. For example, 69 percent of those schools in which LM/LEP students comprise over 25 percent of enrollment are in the highest poverty quartile.

are urban, 36 percent are suburban, and 19 percent are rural. These schools are concentrated in the highest poverty quartile (53 percent), with 28 percent in the next highest, 13 percent in the second, and 5 percent in the least poor quartile of schools.

Characteristics of Schools With Neither Chapter 1 ESL nor Special LM/LEP Services

The presence of LM/LEP students does not necessarily mean that a school offers programs for them. Data from the School Survey show, in fact, that 26 percent of non-Chapter 1 schools and 18 percent of Chapter 1 schools with LM/LEP students offer neither Chapter 1 ESL nor special LM/LEP services.[6] Schools providing neither Chapter 1 ESL nor special LM/LEP services tend to be smaller, have a lower percentage of LM/LEP students, are less urban, and are less poor than schools offering programs for LM/LEP students. Specifically, these no-services schools have a median LM/LEP enrollment of just 1 percent out of a median overall enrollment of 395. Thirty-five percent of these schools are urban, 28 percent are suburban, and 37 percent are rural. In terms of poverty, only 6 percent of these schools fall within the poorest one-fourth of schools, while 43 percent fall in the second poorest one-fourth.

SUMMARY

The data presented in this chapter suggest that Chapter 1 has not replaced special programs for LM/LEP students in the schools. However, a small percentage of schools report Chapter 1 ESL programs as the only special service for LM/LEP students, and about one in five of all public elementary schools with LM/LEP students report offering no language programs to meet the special needs of LM/LEP students.

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[6]Some of these schools may provide other Chapter 1 services, such as compensatory mathematics courses taught bilingually to meet the special needs of these students, but the available data do not permit assessing that possibility. And, it should be noted these schools tend to have relatively small proportions of LM/LEP students enrolled (a median of one percent).

These observations must be taken with caution, however. First, we do not know the magnitude of special program resources available in schools with LM/LEP pupils and therefore cannot assess the extent of coverage within schools. Additionally, we do not know from available data whether students who receive only Chapter 1 ESL have the same deficiencies as students in other schools receiving only LM/LEP services. This may result from some schools and districts using different criteria for identifying LM/LEP students. Thus, schools may be directing Chapter 1 ESL programs toward students who are borderline between needing language assistance and basic skills help.

It is clear that a fairly small segment of elementary schools with LM/LEP students rely solely on Chapter 1 ESL programs to assist their LM/LEP students. Moreover, those schools offering both Chapter 1 ESL and special LM/LEP services tend to be those with higher concentrations of both poor and LM/LEP students. In other words, they are the schools where pupils are more likely to exhibit the dual problems of limited English proficiency and educational disadvantage.

CHAPTER 3

SELECTING STUDENTS FOR CHAPTER 1 AND SPECIAL LM/LEP PROGRAMS

The eligible populations for Chapter 1 and special LM/LEP programs overlap, complicating the task of determining which students belong in which program(s). Technical problems affect school practitioners' ability to isolate difficulties in the use of English from the educational disadvantages associated with poverty. For example, tests for English language proficiency may reveal students who are LM/LEP but they do not rule out that these same students are educationally disadvantaged due to conditions beyond their linguistic difficulties. This chapter examines student placement in terms of district policies and selection criteria. It relies on data available through the School Survey, the District Survey, and the Targeting Study conducted for the National Assessment of Chapter 1. As readers will note, the findings gleaned from these sources raise as many questions as they answer about student selection practices for Chapter 1 and special LM/LEP programs.

According to P.L. 100-297, LEAs must use the same basis for selecting LM/LEP and English proficient students for Chapter 1 participation. But they also must distinguish between educational and language deficiencies in order to determine whether Chapter 1 services are appropriate and can legally be provided under the supplement, not supplant requirement as it pertains to services otherwise required by law. The requirements for uniform selection measures may conflict at a pragmatic level because standardized achievement tests are commonly used to test for educational deprivation, while English language proficiency tests are used to determine language proficiency. In accordance with current regulations, if an LEA administers an English language proficiency test to potential Chapter 1 participants to determine if they are language

deprived, rather than educationally deprived, all potential Chapter 1 students must take that test.

DISTRICT CHAPTER 1 SELECTION POLICIES

As shown in Table 2, over half of the districts with LM/LEP students (53 percent) appear to make no distinctions between LM/LEP and other students in their Chapter 1 selection policies. Most of the remaining districts with LM/LEP students report using other, possibly similar, Chapter 1 selection criteria for English proficient and LM/LEP students. Specifically, 15 percent of the districts admit LM/LEP students on a "case-by-case basis"; 10 percent admit LM/LEP students if they meet the regular criteria and space is available; and 9 percent admit LM/LEP students if "they can benefit from the program." In addition, 13 percent of school districts with LM/LEP students automatically include (8 percent) or exclude (5 percent) LM/LEP students when making their Chapter 1 student selections.

The findings of a special study of Chapter 1 school and student targeting in 30 school districts (the Targeting Study, Wood et al., 1986) support the pattern of LM/LEP student selection for Chapter 1 presented in Table 2. Three of the 13 districts in that study with LM/LEP students had formal policies to exclude LM/LEP students from Chapter 1 directly, or indirectly by restricting each student to only one special program outside the regular class. Despite these restrictive policies, however, some LM/LEP students in these districts received Chapter 1 services. Three other districts had no policies regarding dual participation, that is, they selected students independently for each program. The Targeting Study found a higher percentage of LM/LEP students participating in Chapter 1 in these three districts than would be expected given the percentage of LM/LEP students enrolled. For the other seven districts, Chapter 1 participation was coordinated with participation in special LM/LEP services in several ways, including providing only Chapter 1 services for LM/LEP

TABLE 2

District Policies for Selecting LM/LEP Students to Participate in Chapter 1

Policy	Percent of School Districts With LM/LEP Students	Percent of Chapter 1 School Districts*
LM/LEP Students Automatically Included in Chapter 1	8	5
Same Criteria Used for LM/LEPs as for Other Students	53	34
LM/LEPs Automatically Excluded from Chapter 1	5	3
LM/LEPs Must Meet Regular Criteria Plus Space Must Be Available in the Chapter 1 Program	10	7
LM/LEPs Included if They Can Benefit From the Chapter 1 Program	9	6
Decided on a Case by Case Basis	15	9
No LM/LEP Students/Policy	-	37

Source: Williams, Barbara I., et al. *The District Survey: A Study of Local Implementation of ECIA Chapter 1.* Research and Evaluation Associates, Inc., 1987.

Table reads: Eight percent of districts with LM/LEP students automatically include LM/LEP students in Chapter 1.

* Percentages have been adjusted to account for missing data, and columns may not sum to 100 percent due to rounding.

students in kindergarten and first grade, providing special Chapter 1 classes for LM/LEP students, and serving LM/LEP students through Chapter 1 when the LM/LEP enrollment was too small to justify a special LM/LEP program in a school. The authors of the report on Chapter 1 targeting concluded:

> Whether or not a LEP student participates in Chapter 1 is determined to a great extent by whether or not other resources (e.g., bilingual/ESL) are available to serve LEP students (Wood et al., 1986).

SELECTION CRITERIA FOR CHAPTER 1

Federal guidelines state that the same criteria must be used for all Chapter 1 eligibility determinations, but they do not specify what those criteria are.[7] Districts choose their selection criteria (which are subject to state approval) and they may choose from several sources of information in deciding how to identify eligible students. These sources include data from nationally standardized achievement tests, state or locally developed tests, results from informal diagnosis, academic records, and judgments by professional staff.

Use of Standardized Achievement Tests in Chapter 1 Student Selection

Nearly all districts with Chapter 1 programs report using standardized achievement tests to select participants (Williams, et al., 1987). Standardized achievement test scores may not be the only source used, however, as districts often use teacher judgment and other measures in conjunction with these tests. Nevertheless, even

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[7]The Conference Report for P.L. 100-297 states "[t]he conferees intend that local education agencies may use current Chapter 1 assessment procedures for children who, with or without bilingual assistance in the testing process, can be identified, using testing written in the English language, as educationally deprived children in greatest need of assistance. For children whose lack of English language proficiency precludes valid assessment using such testing, local procedures to screen and select educationally deprived LEP children may be used, e.g. teacher evaluation, language dominance testing, weighting factors, or other indicators of educational deprivation which discriminate on a basis other than just language deficiency" (Conference Report to Accompany H.R. 5, pp. 322-333).

though use of standardized achievement tests for Chapter 1 selection is nearly universal, their use with LM/LEP students may raise several problems. First, the earlier learning experiences of LM/LEP students tend to be more diverse than those of English-proficient children. As a result, standardized achievement tests are likely to rest on some cultural assumptions that are foreign to some LM/LEP children. Second, standardized achievement tests are generally designed as self-administered (under tightly controlled conditions), paper and pencil tests requiring proficiency in reading English, a skill that most LM/LEP students are presumed to lack. To the extent that the structure and language of the test, rather than the students' knowledge and skill, affect performance, the resulting scores on standardized achievement tests will underestimate students' achievement levels. On the other hand, these factors also are likely to affect students' performance in school in general, and therefore may suggest the need for early remedial intervention. Third, primary language versions of standardized achievement tests, with scores directly equatable to English-language versions, are rare even in Spanish.

Use of English Language Proficiency Tests in Chapter 1 Student Selection

According to the Chapter 1 School Survey, English language proficiency tests are used in 22 percent of all Chapter 1 elementary schools as part of their Chapter 1 student selection processes. Further, just 29 percent of Chapter 1 elementary schools where LM/LEP students are enrolled (which includes 33 percent of all Chapter 1 elementary schools, see Figure 1) report using these tests.

For those districts that automatically include or exclude students based on their English language proficiency, such tests, if used, could provide the sole basis for the students' placement. For the districts that decide placement either on a case by case basis or based on ability of the student to benefit, the test may be used alone or in

conjunction with a standardized achievement test or teacher judgments to determine placement. The vast majority of districts either use the same criteria for regular and LM/LEP students or have no special policy for LM/LEP students. These are the districts that probably do not use English language proficiency tests in their Chapter 1 selection process.

Data are not available on how school officials use these tests. Several possibilities exist. For example, low levels of English-language proficiency may qualify or disqualify a LM/LEP student from participating in Chapter 1, depending on the school or district. That is, if a student does poorly on a standardized achievement test and also does poorly on an English-language proficiency test, the score on the achievement test may be considered an invalid measure of educational achievement due to the student's limited English proficiency; thus the student might be disqualified from Chapter 1. On the other hand, school officials may view poor performance on both tests as direct evidence that the student should participate in Chapter 1. School officials may also identify potential LM/LEP students based on their poor performance on a standardized achievement test; then, they may employ the English language proficiency test to determine the presumed source of the student's difficulties and the most appropriate package of services (e.g., Chapter 1 regular, Chapter 1 ESL, special LM/LEP services, or a combination of the three).

The role of English language proficiency tests is much clearer in selecting students for special LM/LEP services. Selection for special LM/LEP programs relies heavily on the results of English language proficiency tests; 91 percent of special LM/LEP teachers report using the tests for determining eligibility for their services.

Use of Teacher Judgment in the Chapter 1 Student Selection Process

As pointed out in Table 2, just over half (53 percent) of Chapter 1 districts with LM/LEP students use the same criteria for selecting LM/LEP students and English-proficient students. It was also noted that standardized achievement tests may not provide a measure for Chapter 1 participation that selects English-proficient and limited-English students on the same basis because of cultural and language problems inherent in those tests. We also pointed out that about 29 percent of schools with LM/LEP students and Chapter 1 programs use English language proficiency tests in selecting Chapter 1 participants. However, we do not know how these test results are interpreted and used by school staff. Substantial gaps remain in knowledge of the procedures and criteria used to select LM/LEP students for Chapter 1 participation.

In addition to tests, we need to examine how other criteria influence the selection of students for Chapter 1 and LM/LEP programs. The case studies and surveys conducted for the National Assessment of Chapter 1 indicate that although test scores are the most commonly used criteria for selection, other measures, particularly teacher judgments, are also brought to bear in many districts. For example, the Targeting Study found that the cutoffs for Chapter 1 admission based on achievement test scores are not strictly applied, resulting in the inclusion of some students above the cutoff, and the exclusion of some below. The decisions in these borderline cases often result from teacher judgments overruling test scores.

The Chapter 1 District Survey provides parallel information. Teacher judgment reportedly is used for Chapter 1 student selection in 90 percent of the districts surveyed. Information about specific uses of teacher judgment in determining eligibility for Chapter 1 are presented in Table 3. Forty-four percent of districts report using teacher judgments to include students who score above the cutoff, while 47 percent of

TABLE 3

Uses of Teacher Judgment in Determining Student Eligibility for Chapter 1

Teacher Judgment Used For:	Percentage of School Districts*
Midyear Transfers and Special Circumstances	58%
Nominating Students for Testing	49
Deciding Not To Serve Students Below the Cutoff	47
Deciding to Serve Students Above the Cutoff	44

Source: District Survey

* Column need not sum to 100 percent because districts could select multiple responses.

Table reads: Fifty-eight percent of school districts reported they used teacher judgment to determine Chapter 1 eligibility in the case of midyear transfers and in special circumstances.

districts indicate the use of teacher judgments in deciding not to serve students below the cutoff.

Unfortunately, no data currently are available that explain how teacher judgments are used in selecting either Chapter 1 or other special services for LM/LEP students. Do teachers determine in advance whether students possess sufficient English skills to be tested for Chapter 1 eligibility? Relatedly, do teachers pass judgment on the results of standardized tests scores, including and excluding LM/LEP students able to benefit from regular Chapter 1 or Chapter 1 ESL programs as opposed to LM/LEP programs? Additional data are necessary to address questions such as these.

SELECTION CRITERIA AND MULTIPLE PROGRAMS

Regardless of which procedures districts use, one can still ask do they appropriately "sort" the LM/LEP students into the most suitable programs. Data from three districts in the Chapter 1 Targeting Study provide a limited view of the results of student sorting. Comparisons were made of the reading achievement test scores and English language proficiency levels of students in special LM/LEP, Chapter 1, and a combination of both programs.[8] The evidence from analysis of these data from the three districts indicates clear differences in reading achievement and English language proficiency among students who receive either Chapter 1 or special LM/LEP services, both Chapter 1 and special LM/LEP services, and neither of the services.

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[8]Three of the 30 districts in that study (1) had enough LM/LEP students for analysis in elementary grades, (2) offered special LM/LEP services as well as Chapter 1 and did not restrict participation in one program because of participation in the other, and (3) had sufficient data on reading achievement and language proficiency to permit comparing students in both areas.

Table 4 presents reading achievement scores and language proficiency levels for public elementary school students in these three Targeting Study districts.[9] Reading achievement scores produce the same pattern in each district. The group of students with the lowest average reading achievement scores are those who receive both Chapter 1 and special LM/LEP services. The next lowest scoring group receives Chapter 1 reading services, followed by the group of students receiving only LM/LEP services. Students receiving neither Chapter 1 reading nor special LM/LEP services have the highest average reading achievement scores.

Students in the three Targeting Study districts who receive only Chapter 1 reading services or neither of these services are generally rated as fluent in English. Conversely, most students receiving special LM/LEP services or those services along with Chapter 1 reading fall within the "non English" or "little English" categories. In addition, students who receive only special LM/LEP services are rated somewhat lower in English fluency than those who also receive Chapter 1 reading.

In all three districts, the students receiving Chapter 1 reading, special LM/LEP services or combinations of these services had different average achievement scores. Those who only receive special LM/LEP services tend to have the lowest English language proficiency levels and reading achievement scores 10 to 15 NCEs higher than students receiving only Chapter 1 services; these data suggest that, in general, special LM/LEP services are directed toward students with language, not reading, problems.

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[9]Reading achievement was selected because Chapter 1 reading programs are common to the three districts, and because roughly similar achievement test data were available in reading. Normal curve equivalent scores were used to facilitate comparison between groups of students participating in different programs; the NCEs were averaged across grades with a clear recognition that, while empirically reasonable, such averaging assumes the reading tests at the different grade levels are measuring the same constructs. The language proficiency levels are a five-point ordinal scale reported for students in each of the three districts. Since districts' values are not combined, it does not matter if the ordinal measures are derived in the same way across districts.

TABLE 4

Reading Achievement Scores and English Language Proficiency Levels for Students Receiving Chapter 1 Reading Services or Special Services for LM/LEP Students, Grades 2-6, in Three School Districts

School District	Mean Reading Achievement Normal Curve Equivalent Scores* Programs			
	No Program	Chapter 1 Only	Special Language Only	Both Chapter 1 & Language
01	55	24	34	21
R1	57	32	45	28
M1	63	40	54	33

School District	Median English Language Proficiency Level** Programs			
	No Program	Chapter 1 Only	Special Language Only	Both Chapter 1 & Language
01	5	5	1	2
R1	5	5	2	3
M1	5	5	2	2

Source: Targeting Study conducted for the Chapter 1 National Assessment, 1985-86.

Table reads: The mean reading achievement NCE score for students who receive no program (i.e., neither Chapter 1 nor special language) in District 01 is 55.

* Mean NCE scores are from standardized achievement test results averaged across grades and students indicated.

** (1) non-English speaker, (2) little English speaker, (3) average English speaker, (4) near fluent English, (5) fluent English speaker; median scores are represented.

Students who receive only Chapter 1 reading appear to have no apparent English language problems but on standardized reading achievement tests score well below students in their districts who receive neither Chapter 1 nor special LM/LEP services. Chapter 1 reading services appear to be directed to students in these three districts with reading, not English-proficiency, problems.

The reading achievement scores of students in these three districts who receive both Chapter 1 reading and special LM/LEP services are 15 to 21 NCEs below their LM/LEP peers who receive only special LM/LEP services, indicating clear reading problems for students receiving both services. At the same time, their median English proficiency levels are slightly higher overall in comparison to the same group, even though clearly well below English proficiency.

While these data suggest that students receiving different types of services are appropriately selected in terms of their achievement scores and levels of English proficiency, they are interesting from another standpoint as well. The data available in these districts demonstrate that some LEAs are able to obtain standardized test results for students who have modest fluency in English. It is unknown how these districts assessed students' achievement and the extent to which the test scores can be equated with those of English-proficient students.

SUMMARY

The majority of districts report their Chapter 1 selection policies do not differ for English proficient and LM/LEP students. At the same time, approximately 13 percent of districts either automatically include or exclude LM/LEP students when deciding who will receive Chapter 1 services. Another 34 percent of districts do not report using identical procedures for selecting LM/LEP and English proficient students. These results indicate that just over half of the districts report adherence to Chapter 1's requirement to use the same Chapter 1 selection policies for English-

proficient and LM/LEP students. The outcomes of these practices, as well as their actual operation, remain unclear.

The most commonly used criteria for selecting students for Chapter 1 participation include standardized achievement test scores and teacher judgment, with teacher judgments apparently used to override strict application of the test scores. Once again, however, the influence of teacher judgments on LM/LEP students' participation in Chapter 1 is unknown. English language proficiency tests function as the primary means of selecting students for special LM/LEP programs; moreover, 30 percent of Chapter 1 schools with LM/LEP students report using such tests for selection of Chapter 1 students.

Despite the problems involved in determining the combination of measures used by schools to assign LM/LEP students to various services, data from three districts included in the Chapter 1 Targeting Study suggest that test scores and teacher judgments result in placing distinctive groups of students in Chapter 1 reading, special LM/LEP services, or both. In those three districts, standardized achievement scores and measures of English proficiency distinguish most students in need of language assistance from those in need of reading assistance. It remains for future studies to find whether these patterns hold generally across districts.

CHAPTER 4

SERVICES PROVIDED TO LM/LEP STUDENTS BY CHAPTER 1 AND SPECIAL LM/LEP PROGRAMS

This chapter addresses a basic question about Chapter 1 and other services to LM/LEP students: how do Chapter 1 ESL programs differ, if at all, from regular Chapter 1 services on one hand, and special LM/LEP programs, on the other? In addressing this question, we can establish a basis for discussion and further research on two associated issues of concern to policy makers: 1) Can the English language needs of LM/LEP students be met in a Chapter 1 ESL program without eroding the compensatory education nature of Chapter 1, and 2) Do Chapter 1 ESL programs replace other special programs to which LM/LEP students are otherwise legally entitled?

This chapter describes and compares services offered by Chapter 1 ESL, regular Chapter 1, and special LM/LEP programs. Specifically, we examine several characteristics of instructional services, including (1) instructional group size, (2) instructional time, (3) setting for service delivery, (4) characteristics of instructors, and (5) the use of languages other than English in instruction. These dimensions of instruction provide only a partial glimpse of the shape of these special programs in schools. For example, available data do not permit comparisons of curricular content or the structure of lessons. However, these dimensions provide a point of departure for describing Chapter 1 ESL programs in relationship to other programs.

The information in this chapter indicates that Chapter 1 ESL programs are more intense than regular Chapter 1 program services and less intense than those of special LM/LEP programs in terms of minutes of instruction. Special LM/LEP services, when compared to Chapter 1 services, either regular or ESL, tend to be offered for longer periods throughout the day, are provided by teachers who are likely to have bilingual

or ESL certification, and place greater reliance on the use of languages other than English in instruction. To summarize, Chapter 1 ESL programs occupy a middle ground between special LM/LEP and regular Chapter 1 program services.[10] However, these data do not support any conclusions about whether the intermediate status of Chapter 1 ESL programs means that both the compensatory education and the English-language needs of the participants are met.

INSTRUCTIONAL GROUP SIZE

Instructional groups for Chapter 1 ESL, special LM/LEP services, and other Chapter 1 services are typically smaller than those found in regular instructional programs[11]. In addition, because Chapter 1 and special LM/LEP teachers frequently have instructional aides to assist them, student-staff ratios are also low; for example, the median student-staff ratio is 4 to 1 in Chapter 1 ESL instructional groups (Figure 3). Further, student-staff ratios may be somewhat smaller in regular Chapter 1 and Chapter 1 ESL than in special LM/LEP subjects. Comparing regular Chapter 1 and special LM/LEP reading produces student-staff ratios of 3 to 1 and 5 to 1, respectively; comparing Chapter 1 ESL with special LM/LEP ESL provides ratios of 4 to 1 and 5 to 1, respectively.

INSTRUCTIONAL TIME

With few exceptions, students receive Chapter 1 ESL, Chapter 1, and special LM/LEP services daily (Chapter 1 School Survey). However, this uniformity does not extend to the number of minutes of instruction per day students receive in those

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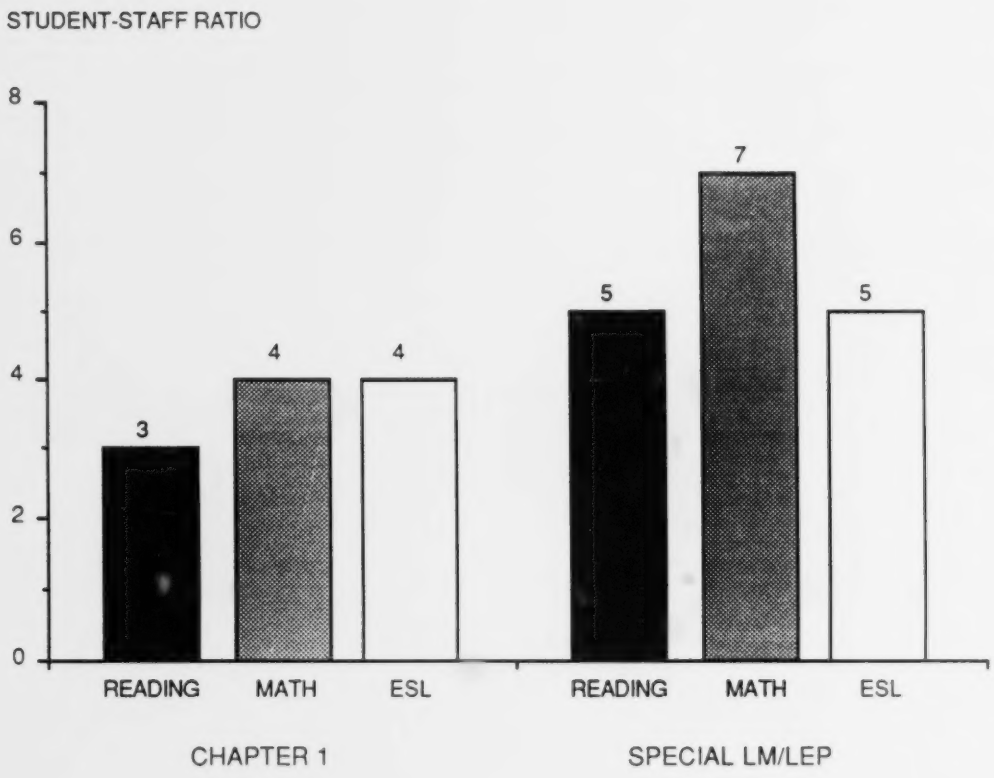
[10]The Chapter 1 Resources Allocation case studies observed that Chapter 1 ESL or bilingual projects were about twice as "intense" as reading projects (Goertz, 1987).

[11]Data on services presented in this Chapter were provided by teachers as a component of the Chapter 1 School Survey. Chapter 1 ESL and regular Chapter 1 teachers include a small percentage who teach private school students; teachers providing special LM/LEP services generally teach only public school students.

FIGURE 3

Student-Staff Ratios In Chapter 1 And Special LM/LEP Programs, By Subject



SOURCE: Survey of Schools conducted for the National Assessment of Chapter 1, 1985-86.

Figure reads: The median student-staff ratio for Chapter 1 reading is 3 to 1.

programs. Table 5 presents data on the median minutes per day that typical students receive instruction as reported by Chapter 1 ESL, special LM/LEP, and other Chapter 1 teachers. The median number of minutes per day of Chapter 1 ESL instruction is 60, while the median for special LM/LEP services is 205 (three hours, twenty-five minutes) and the median instructional time for regular Chapter 1 reading is 35 minutes. Thus, Chapter 1 ESL teachers report more minutes of instruction per day for their pupils than regular Chapter 1 teachers, yet both programs provide considerably less instructional time than special LM/LEP programs.

In addition to looking at the median minutes per day, it is also useful to look at the distribution of those minutes to determine whether most teachers in each of these programs report similar or widely differing values. The interquartile range of instructional minutes per student per day for Chapter 1 ESL is 45 to 300 minutes, for regular Chapter 1, 30 to 50 minutes, and for special LM/LEP, 60 to 330 minutes.[12] These distributions reveal that there is much less variation in instructional time in regular Chapter 1 than in Chapter 1 ESL or special LM/LEP services.

Figure 4 provides another perspective on the distribution of reported minutes per day. In the figure, teachers' responses are categorized by time ranges. Note that the shape and height of the Chapter 1 ESL line cause it to be plotted between the special LM/LEP and other Chapter 1 services lines. The tail on the far right side of the Chapter 1 ESL line indicates those services are sometimes offered for the great majority of the school day, namely over 300 minutes or five hours per day. Special programs which involve students for that amount of time per day are generally

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[12]The interquartile range presents the values at the first and third quartiles. For example, an interquartile range of 30 to 50 minutes per day of Chapter 1 instruction means that approximately half of the Chapter 1 teachers reported that their typical student received between 30 and 50 minutes of Chapter 1 instruction per day. Further, in this example, one-fourth of the Chapter 1 teachers reported that their typical student received over 50 minutes and one-fourth reported that their typical student received less than 30 minutes per day of Chapter 1 instruction.

TABLE 5

Median Minutes Per Day of Regular Chapter 1, Chapter 1 ESL, and Special LM/LEP Instruction

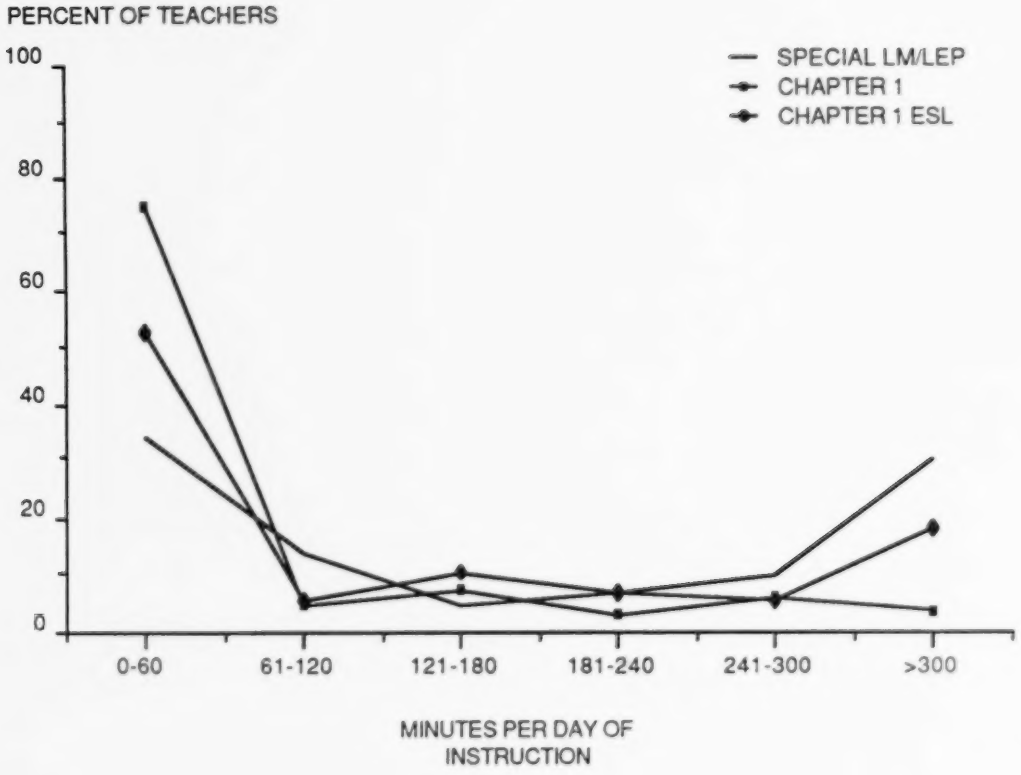
Program	Median Minutes/Day	Interquartile Range
Regular Chapter 1	35	30-50
Chapter 1 ESL	60	45-300
Special LM/LEP	205	60-330

Source: Survey of Schools conducted for the Chapter 1 National Assessment, 1985-86.

Table reads: The typical Chapter 1 student received 35 minutes per day of regular Chapter 1 instruction.

FIGURE 4

Minutes Per Day Of Instruction In Chapter 1, Chapter 1 ESL, And Special LM/LEP Programs



SOURCE: Survey of Schools conducted for the Chapter 1 National Assessment, 1985-86.

Figure reads: Thirty-four percent of special LM/LEP teachers reported that their typical student receives 0 to 60 minutes per day of special LM/LEP instruction.

programs that replace the regular program. Those teachers who reported relatively few minutes per day (and whose responses thus fell on the left of the graph) probably provide pull-out or in-class services.

Except for the relatively pronounced tail on the right, the shape of the line for Chapter 1 ESL looks very much like the regular Chapter 1 line; the majority of both groups of teachers report students receive less than an hour of instruction per day. However, a much larger percentage, over 70 percent, of regular Chapter 1 teachers report that their typical Chapter 1 student receives under 60 minutes per day of Chapter 1 instruction. On the other hand, only 35 percent of special LM/LEP teachers indicate that their typical student spends under 60 minutes per day in special LM/LEP instruction, while another 35 percent report that their typical student receives over 300 minutes of instruction each day.

SERVICE DELIVERY MODELS

The data analyzed for this report do not permit a detailed discussion of the service delivery models schools use for these special programs. Some teachers responding to the School Survey misunderstood the terms used to describe various models, making use of the data on this point risky. Even with these qualifications, the School Survey data indicate that schools generally offer regular Chapter 1 services in a pull-out or in-class setting (69 percent and 14 percent, respectively) where a special teacher provides supplemental compensatory services for a limited portion of the school day. Further, LM/LEP program teachers report that special LM/LEP services are often offered in a replacement setting (67 percent) where all students receive the special service and the teacher serves as the regular classroom teacher. Finally, Chapter 1 ESL teachers report that Chapter 1 ESL is offered either through in-class approaches (42 percent) or in replacement settings (39 percent). These findings receive some support from the Chapter 1 Resources Allocation case studies conducted for the

National Assessment, which found that replacement settings were generally used for Chapter 1 ESL or bilingual programs (Goertz, 1987).

CHARACTERISTICS OF INSTRUCTORS

Teachers' years of experience, highest academic degree, and certification provide another means of comparing Chapter 1 ESL, Chapter 1, and special LM/LEP programs. While these three characteristics are insufficient for determining that one group of teachers is better qualified than another, the measures reveal differences in the formal qualifications of the instructors employed by the programs. The comparisons result in a pattern resembling that associated with instructional time differences among the programs: the characteristics of Chapter 1 ESL teachers place them between teachers in regular Chapter 1 and special LM/LEP programs in terms of years of experience and specialist credentials.

Years of Experience

Chapter 1 ESL teachers in elementary schools have a median of 10 years of teaching experience, regular Chapter 1 teachers have 13, and special LM/LEP teachers have 9. The fewer years for those working with LM/LEP students may reflect the recent growth in the field of bilingual education and the subsequent entry of newly qualified instructors into the field.

Highest Academic Degree

The levels of educational attainment for the three sets of teachers differ slightly. Over 55 percent of the teachers in both Chapter 1 groups and in the LM/LEP group have some level of education beyond a bachelors degree. However, only 28 percent of Chapter 1 ESL teachers hold a masters degree or higher, while 51 percent of regular Chapter 1 teachers and 44 percent of special LM/LEP teachers have that same level of education.

Specialist Certification

The three groups of teachers (Chapter 1 ESL, Chapter 1, and special LM/LEP) differ markedly in whether or not they hold specialist certification (Figure 5). Only a few Chapter 1 ESL teachers have bilingual education or ESL credentials (10 percent and 4 percent, respectively). Seventy-two percent of special LM/LEP teachers have bilingual credentials and 25 percent have ESL certification or credentials. Most regular Chapter 1 teachers do not hold bilingual or ESL credentials but 69 percent report a specialist credential in reading.

STAFF CONFIGURATIONS

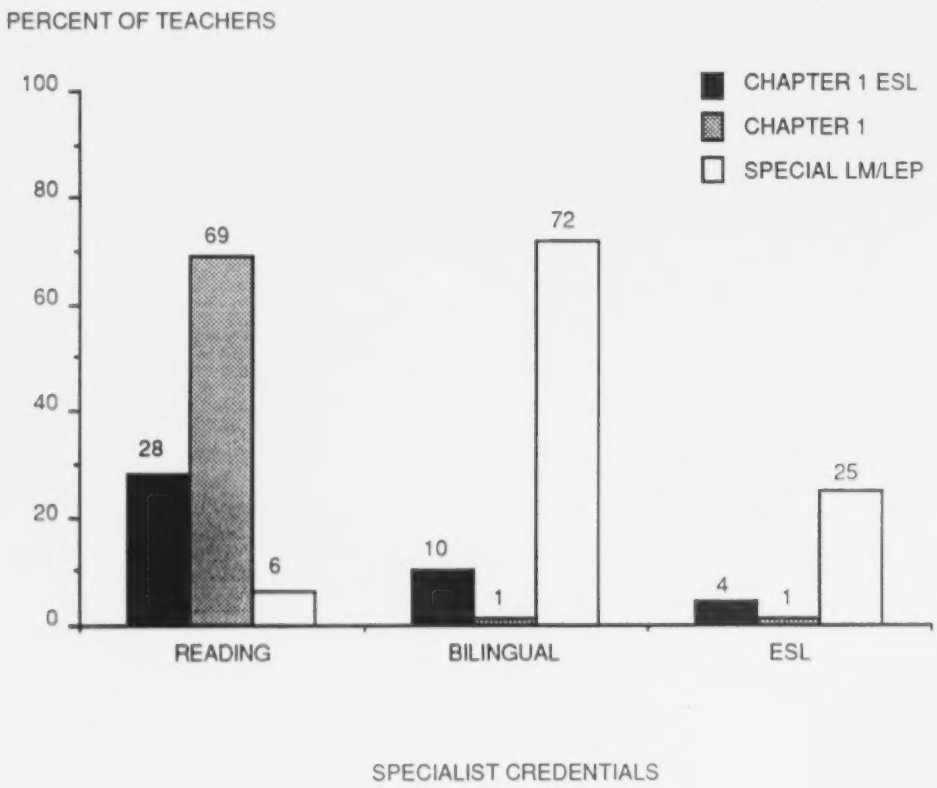
Teachers, not aides, instruct pupils in regular Chapter 1, Chapter 1 ESL, and special LM/LEP programs. As part of the Chapter 1 School Survey, principals were asked to indicate the staffing patterns that best described their Chapter 1, Chapter 1 ESL, and special LM/LEP classes. The results presented in Figure 6 indicate that in the large majority of public elementary schools either a Chapter 1 teacher or a special LM/LEP teacher leads instruction in these programs. In only about 5 percent of the elementary schools are aides the primary instructors in any one of the three programs. These data suggest that although schools may invest in aides to work with LM/LEP students, those aides assist teachers and do not replace them.

INSTRUCTIONAL ROLE OF AIDES

The majority of Chapter 1 ESL, other Chapter 1, and special LM/LEP programs rely on instructional aides to assist teachers. Seventy-five percent of Chapter 1 ESL teachers, 66 percent of special LM/LEP teachers, and 51 percent of regular Chapter 1 teachers surveyed in the School Survey reported using aides.

FIGURE 5

Specialist Credentials Of Special LM/LEP, Chapter 1, And Chapter 1 ESL Public Elementary School Teachers

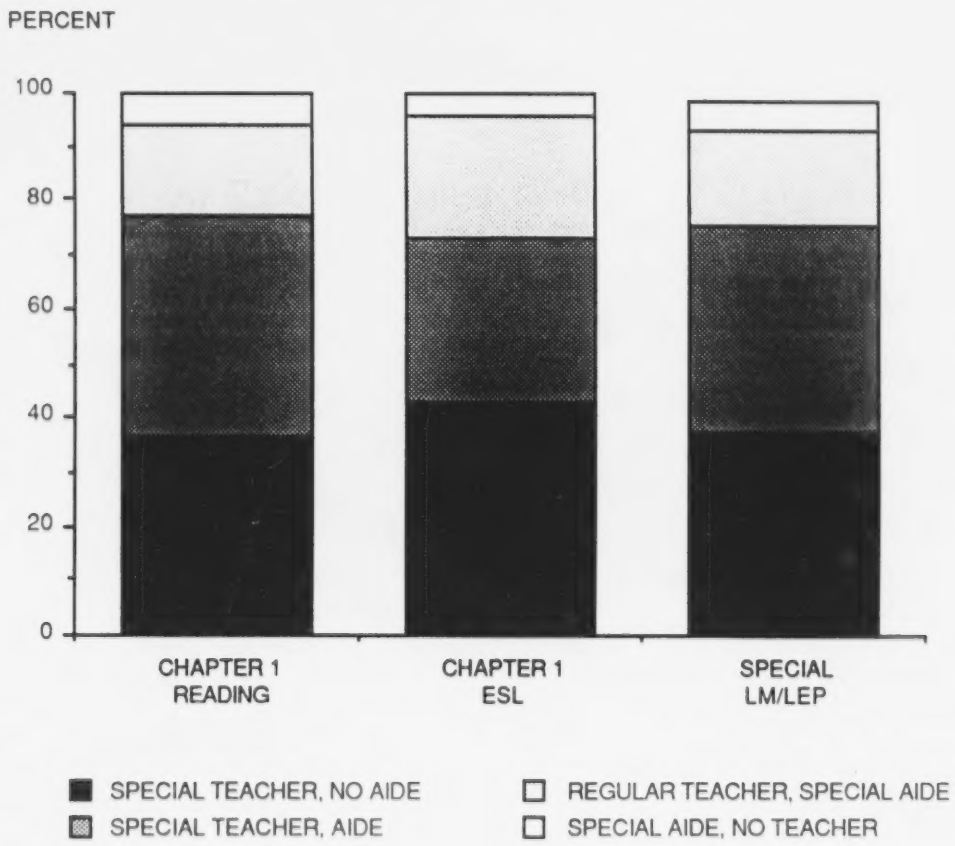


SOURCE: Survey of Schools conducted for the Chapter 1 National Assessment, 1985-86.

Figure reads: Sixty-nine percent of Chapter 1 teachers have specialist credentials in reading.

FIGURE 6

Staff Configurations In Special LM/LEP And Chapter 1 Programs



SOURCE Survey of Schools conducted for the Chapter 1 National Assessment, 1985-86.

Figure reads: Six percent of public elementary school principals reported that the best description of their configuration for Chapter 1 Reading was a Chapter 1 aide with no teacher.

Percentages may not sum to 100 due to rounding.

Aides are more prevalent in Chapter 1 ESL and special LM/LEP programs than in Chapter 1 and often use a language other than English in instruction. The incentives for using aides in Chapter 1 are to reduce student-staff ratios, contain costs, or increase the size of the population served; for special LM/LEP programs and Chapter 1 ESL aides carry an additional incentive because of their ability to provide native language instructional assistance. In fact, according to the school survey, other than providing native language instruction, the tasks performed by aides in special LM/LEP programs are very similar to those performed by Chapter 1 aides: assisting with teacher assigned work, correcting student's work, giving feedback, and assisting with non-instructional tasks.

The rationale for an instructional role for aides in Chapter 1 ESL and special LM/LEP programs was identified in case studies commissioned by the National Assessment of Chapter 1 and is illustrated in the following vignettes:

> In [a] district with a high concentration of limited English proficient students, bilingual aides are used because there are not enough bilingual certificated personnel in the area to staff the Chapter 1 reading programs. The assistant superintendent said, "The district has a preference for teachers, but it is difficult to attract regular certificated bilingual personnel.... We are encouraging regular teachers to take Spanish. Also, we are encouraging paraprofessionals to get their credentials."

> Aides can also be trained for specialized roles fairly cheaply. A large Western district developed an inservice training program for aides, but not for teachers, on instructional techniques for limited English proficient students [because of an influx of Southeast Asian refugees]. Consequently, the district has a whole cadre of fairly well-trained aides in the schools, while there are relatively few specially trained teachers (Knapp, 1986).

USE OF LANGUAGES OTHER THAN ENGLISH IN CHAPTER 1 AND SPECIAL LM/LEP INSTRUCTION

Native language instruction is common in classes with LM/LEP students. When LM/LEP students participate in the various special programs, 33 percent of regular Chapter 1 reading teachers or aides, 41 percent of Chapter 1 ESL teachers or aides, and 50 percent of Chapter 1 mathematics teachers or their aides report using some

language other than English in instruction (Table 6). The reports of LM/LEP teachers of reading and mathematics regarding the use of languages other than English are even more striking. Seventy-eight percent of special LM/LEP reading teachers and 83 percent of special LM/LEP mathematics teachers or their aides report using some native language instruction.

The use of a language other than English is generally less common in ESL instruction than in other services for LM/LEP students because these programs are designed to promote English proficiency through a classroom emphasis on English. Only 41 percent of special LM/LEP teachers of ESL report that they use their students' native language to teach their lessons, the same percentage reported by Chapter 1 ESL teachers. In fact, a substantial majority of teachers in special LM/LEP programs and Chapter 1 ESL rely on their aides to assist students in their native language: 75 percent of teachers in special LM/LEP programs and 62 percent of Chapter 1 ESL teachers report their aides use languages other than English in the classroom.

At the school level, the use of languages other than English for instruction increases as the percentage of LM/LEP students in the school increases (Table 7). Depending on the subject, between 58 and 62 percent of principals with over 5 percent LM/LEP students report that teachers in their schools use native language instruction, but where less than 5 percent of the enrolled students are LM/LEP, these percentages are reduced by almost half. These patterns suggest that schools with large populations of LM/LEP students may find it easier to justify hiring a bilingual teacher who can teach in the students' primary language, while schools with only a few LM/LEP students may elect to focus on ESL services that forego native language instruction.

TABLE 6

Percentage of Chapter 1 and Special LM/LEP Public Elementary School Teachers Using Languages Other Than English, By Subject

	Percent of Chapter 1 Teachers with LM/LEP Students Using Languages Other Than English	Percent of Special LM/LEP Teachers Using Languages Other Than English
Reading	33	78
Mathematics	50	83
ESL	41	41

Source: Survey of Schools conducted for the Chapter 1 National Assessment, 1985-86.

Table reads: Of Chapter 1 reading teachers with LM/LEP students, 33 percent use languages other than English in instruction.

TABLE 7

Use of Languages Other Than English for Instruction, By Percentage of LM/LEP Students Enrolled in the School

Percent of LM/LEP Students Enrolled*	Percentage of Schools Using Languages Other Than English for Instruction		
	Reading	Math	Language Arts
Lowest One-Third	19	14	25
Middle One-Third	30	29	28
Highest One-Third	58	60	62

Source: Survey of Schools conducted for the Chapter 1 National Assessment, 1985-86.

* Lowest one-third of schools has one percent or fewer LM/LEP students; middle one-third has 1.1 to five percent LM/LEP students; highest one-third has more than five percent LM/LEP students.

Table reads: Of the one-third of schools with the smallest percentage of LM/LEP students enrolled, 19 percent have some teachers or aides who use languages other than English in reading instruction.

Although the Chapter 1 School Survey data do not document the frequency with which individual teachers and aides use a language other than English in their classes, other evidence suggests that, even in those classes where teachers use the students' native language, English remains the medium of instruction from 72 to 92 percent of the time (Crawford, 1987).

SUMMARY

In response to the original question addressed in this chapter, the evidence shows that Chapter 1 ESL and special LM/LEP instructional services are different. Special LM/LEP programs' services appear more time-intensive than either regular or ESL services funded by Chapter 1. This seems due in part to the greater use of replacement classrooms for special LM/LEP instruction and greater use of pull-out or in-class services for regular Chapter 1 programs. About equal percentages of schools offer Chapter 1 ESL as a replacement program or an in-class program. Special LM/LEP teachers are more likely to have bilingual or ESL credentials, have fewer years of experience, teach slightly larger instructional groups, and, except for ESL classes, use languages other than English in their classroom instruction. These patterns suggest that special LM/LEP services in the elementary schools often function as a comprehensive, alternative class designed to meet both the language and basic academic instructional needs of LM/LEP students and to replace students' regular classroom assignment.

The instructional features of Chapter 1 ESL programs fall in between those associated with LM/LEP services and regular Chapter 1. In many respects, elementary schools appear to use Chapter 1 ESL services primarily as instructional supplements, not alternatives, to regular or bilingual forms of instruction. In some schools Chapter 1 ESL may add extra instruction for students already in a special LM/LEP classroom, while in others it may provide help to LM/LEP students enrolled in regular

education classes. However, these patterns are somewhat speculative based on available data. In fact, considerable variability surrounds the reports of LM/LEP and Chapter 1 ESL teachers regarding the various dimensions of instruction explored in this chapter. The role of Chapter 1 ESL and LM/LEP services in meeting the needs of LM/LEP students may depend in part on the district and school-level resources available for such students as well as the educational philosophy prevalent in the district. Unfortunately, available data do not allow us to address these considerations.

CHAPTER 5

CONCLUSIONS

This report relies on data available from the National Assessment of Chapter 1 and other sources to address three aspects of the relationship between Chapter 1 and special LM/LEP programs of particular interest to federal policymakers. First, does Chapter 1 provide English language services for LM/LEP students in place of non-Chapter 1 special LM/LEP programs; second, do Chapter 1 selection procedures distinguish between language deficiency and educational deprivation; and third, do Chapter 1 compensatory programs become language acquisition programs when LM/LEP students are recipients of the program. While this report does not fully answer these concerns, it does bring together information that may inform their discussion and sets out areas where additional research is needed.

The concerns addressed in the report derive from several objectives of federal policy that produce both theoretical and practical dilemmas. These dilemmas in large part stem from the reality that many LM/LEP students are dually disadvantaged in schools: they are deficient in English skills and low achieving. Federal regulations governing the appropriate uses of Chapter 1 funds specifically state that Chapter 1 monies may not be used to provide services which are otherwise required by law, and *Lau v. Nichols* states that districts must supply special services to address the language deficiencies of LM/LEP students. At the same time, federal nondiscrimination requirements prohibit districts from excluding LM/LEP students from participation in Chapter 1 programs. Consequently, districts and school officials face the obligation to include eligible LM/LEP students in Chapter 1 and to base that eligibility on measures of achievement as opposed to English language proficiency. However, isolating students' low achievement from their English language proficiency problems may not be possible with current assessment instruments.

An issue embedded in the debate over Chapter 1 programs' inclusion of LM/LEP pupils centers on the extent to which schools can modify the compensatory focus of Chapter 1 basic skills instruction to meet the language deficiencies of LM/LEP students. Some proponents of maintaining a basic academic skills focus in the federal compensatory education program assert that Chapter 1 is (and should be) designed to meet the academic needs of educationally disadvantaged students. The appropriateness (and legality) of using Chapter 1 funds to provide ESL instruction to LM/LEP pupils, which a number of schools do, constitutes a specific instance where the boundaries are unclear between the basic skills and language skills objectives of Chapter 1 programs.

This report summarizes the results of a variety of analyses undertaken in the three areas outlined above, primarily using data gathered as part of the National Assessment of Chapter 1. For example, analyses of the distribution of the various special programs for LM/LEP and disadvantaged students across schools with LM/LEP students provide information about districts' use of Chapter 1 funds to support legally-mandated services for LM/LEP students. Analyses of district and Chapter 1 school selection measures as well as the characteristics of students selected for different programs in three districts help address the issue of selection of LM/LEP students into Chapter 1 and special LM/LEP programs. Finally, the report presents analyses of the instructional features of Chapter 1 ESL, regular Chapter 1, and special LM/LEP services in an effort to describe the extent to which Chapter 1 ESL programs differ from these other special services. Documenting the differences among the programs provides useful background knowledge for discussions about whether ESL services constitute an appropriate use of Chapter 1 funds. The conclusions resulting from these analyses are summarized below under each issue area.

Do Chapter 1 programs replace other English language acquisition programs for LM/LEP students?

About one-third of Chapter 1 public elementary schools enroll language minority-limited English proficient students, and all but 18 percent of these schools provide some special language services, including Chapter 1 ESL services, for these students. Fifty percent of Chapter 1 schools offer only special LM/LEP program services funded from non-Chapter 1 sources, another 10 percent offer only Chapter 1 ESL, and 22 percent offer both Chapter 1 ESL and special LM/LEP programs in addition to their regular Chapter 1 services. In other words, information from this study shows that the presence of a Chapter 1 program does not appear to preclude the presence of a special LM/LEP program in most schools with LM/LEP students.

Elementary schools that offer both Chapter 1 ESL and special LM/LEP programs tend to be those schools that are poorer, more urban, and higher in the percentage of students who are LM/LEP than schools with just one of these programs. In that respect, federal Chapter 1 programs appear to reach schools with students who share the dual deficits of poor English language skills and poverty. Schools without either Chapter 1 ESL or special LM/LEP services tend to be smaller, less poor, and lower in their concentration of LM/LEP students than schools with one or both of these services.

Although the data indicate the presence of special services for LM/LEP students in many schools, they provide only partial information. They do not indicate whether special LM/LEP programs provide sufficient resources to address the needs of all LM/LEP pupils entitled to services. In these cases, Chapter 1 services, and in particular Chapter 1 ESL services, may be used to address these educational needs.

How do districts select LM/LEP students for Chapter 1? Do Chapter 1 selection procedures distinguish between students who are educationally disadvantaged and those who are only limited English proficient?

A small majority of districts with LM/LEP students (53 percent) use a single set of criteria for selecting students for Chapter 1, regardless of the students' English language proficiency. These criteria generally include scores on standardized achievement tests and teacher judgments. A small percentage of districts (13 percent) could be in violation of Chapter 1 requirements because they automatically exclude or include LM/LEP students in their Chapter 1 programs, and another 34 percent of Chapter 1 districts with LM/LEP students do not use identical procedures for selecting LM/LEP and English proficient students.

Results from three districts included in the Chapter 1 Targeting Study suggest that test scores and teacher judgments result in placing distinctive groups of students into Chapter 1, special LM/LEP services, or both. Students selected for Chapter 1 have a lower mean reading achievement score than those selected for special LM/LEP services. Students enrolled in special LM/LEP programs have the lowest English language proficiency levels. Those enrolled in both programs have the lowest mean reading achievement of those students tested as well as somewhat low English language proficiency levels.

At the same time, it is not clear whether standardized achievement tests can provide valid measures of student achievement for LM/LEP students, since those tests are rarely comparable for different language groups. It is also not clear from data collected for the National Assessment of Chapter 1 how districts and school officials use English language proficiency tests and teacher judgments when identifying eligible students for special services.

Is Chapter 1 ESL different from regular Chapter 1 compensatory education and from non-Chapter 1 special LM/LEP programs?

Chapter 1 ESL services differ from those offered by regular Chapter 1 and special LM/LEP programs. Chapter 1 ESL services fall in between these other special services on several instructional dimensions. Special LM/LEP services not funded by Chapter 1 involve more minutes of instruction than Chapter 1 ESL, and, in turn, Chapter 1 ESL programs are more time-intensive than regular Chapter 1 programs. Instructional group sizes are slightly larger in special LM/LEP programs than they are in either Chapter 1 ESL or regular Chapter 1 programs. Instructors providing special LM/LEP services are more likely than instructors of Chapter 1 ESL to have specialist credentials in ESL or bilingual education, although about 10 percent of Chapter 1 ESL teachers do have those credentials. Instructors providing special LM/LEP reading and mathematics services are more likely than instructors of Chapter 1 ESL to use languages other than English for instruction. Regular Chapter 1 teachers and aides are least likely, even when LM/LEP students are present, to use a language other than English for instruction. Finally, the settings used for instruction apparently differ across the three programs. Special LM/LEP services are generally provided as replacement classes as their larger minutes per day of instruction suggest. Most elementary schools report that pull-outs are the dominant approach used for regular Chapter 1 services, while Chapter 1 ESL programs appear fairly evenly divided into replacement programs in some schools and in-class programs in others. The particular setting adopted for Chapter 1 ESL may ultimately depend on the pedagogical views of district officials as well as the resources available to the schools.

IMPLICATIONS

The information presented in this report yields both reassuring and disquieting findings related to federal policy surrounding the relationship of Chapter 1 and services

for LM/LEP students. On one level, the compensatory, basic skills focus of the Chapter 1 program as a whole is not threatened by the population of LM/LEP students. These students are concentrated in a subset of districts and schools across the nation, and consequently their presence does not affect the operations of the majority of Chapter 1 projects.

On another level, while the majority of Chapter 1 schools with LM/LEP students offer special non-Chapter 1 funded services for these students, a noticeable minority (28 percent) offer only Chapter 1 ESL services or no special services at all. Moreover, while Chapter 1 ESL programs can be shown to differ from special LM/LEP services not provided by Chapter 1, they also differ from regular Chapter 1. The question remains as to whether they exceed the boundaries of what is allowed by Chapter 1 requirements because they focus on the language deficiencies of LM/LEP students.

At the practical level, district and school officials are left with the responsibility of identifying the English proficiency needs of students as distinct from their educational achievement deficiencies. Some districts may have found paths for overcoming the problems inherent in English-language standardized achievement tests. Unfortunately, little information is currently available about how districts make these determinations. A slight majority of districts attempt to adhere to federal guidance in using the same procedures to assess English-proficient and non-English proficient students, but how they implement these procedures and with what consequences remains unclear.

Data collected by the Chapter 1 National Assessment, while providing recent information about Chapter 1 services for LM/LEP students, will need to be amplified by additional research if policymakers want definitive answers for many of the questions raised in this report. In many cases the sample sizes or wording of items contained in the national surveys commissioned as part of the National Assessment precluded

reaching firm conclusions in specific areas. Additional research about how districts and schools select students for Chapter 1 or special LM/LEP programs, the adequacy of resources other than Chapter 1 for serving LM/LEP students, district decisions on the mix of funding and programs for meeting the needs of LM/LEP students, and formal and informal methods of coordinating services for LM/LEP students in schools would be particularly informative as policymakers grapple with how Chapter 1 programs and services for LM/LEP students can function harmoniously. Numerous different practices will continue to be carried out by school authorities in the absence of a clear, legal mandate as to:

1. What constitutes LM/LEP status,
2. How to distinguish LM/LEP students whose educational deprivation stems solely from limited English proficiency from other LM/LEP students, and
3. How to determine what LM/LEP services are "otherwise required by law."

Some districts automatically include all LM/LEP students in Chapter 1; others automatically exclude those students from Chapter 1, and most fall somewhere in between. Until the law is made more specific or a high level of consensus is reached among educators, the ambiguity surrounding these issues will continue.

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APPENDIX A

DESCRIPTION OF SCHOOL SURVEY, DISTRICT SURVEY, AND STUDY OF TARGETING PRACTICES

This appendix contains a general description of the design and procedures of the School Survey, the District Survey, and the Study of Targeting Practices conducted for the National Assessment of Chapter 1.

I. NATIONAL SURVEY OF ECIA CHAPTER 1 SCHOOLS: DESIGN AND PROCEDURES

The School Survey was based on a sample of 1,200 elementary and secondary schools selected from a random, stratified sample of primary sampling units (PSUs) composed of school districts. Approximately 4,000 respondents were selected from these schools to obtain profiles which were nationally representative of Chapter 1 elementary and secondary schools as well as of all elementary schools. In addition, data from these respondents were used to estimate variations among Chapter 1 schools and all elementary schools as well as between Chapter 1 and non-Chapter 1 schools along selected dimensions of interest, such as school poverty rates.

Sample Design and Weighting Coefficients

Selection of School Districts

The sampling frame employed in the selection of sample school districts was the 1985 Quality Education Data (QED) school file aggregated to the district level. This file contained a comprehensive and current listing of school districts and characteristics of interest.

To achieve adequate representation of different types of school districts, three stratification variables were employed for organizing the district listings prior to selection: region, urbanicity, and Orshansky poverty index. Region was assigned to a school district in accordance with the four Census regions: Northeast, North Central, South, and West. Urbanicity, as contained on the QED tape, codes a school district as being located in an urban area, a suburban area, or rural area. Three groups were identified by the third stratification variable, the Orshansky poverty index, available from the Census by school district. The three levels were: (1) districts with 12 percent or fewer students below the poverty level, (2) districts with more than 12 percent but less than 25 percent of students below the poverty level, and (3) districts with 25 percent of more students below the poverty level. Thirty-six strata were created by the use of the three stratifying variables.

Primary sampling units (PSUs) were formed from school districts within these strata. A school district with 15 or more schools constituted a PSU. Within each

stratum, districts with fewer than 15 schools were combined to form PSUs. School districts within a State were joined until the combined number of schools was at least 15. These PSUs, therefore, had a minimum number of 15 schools though the number of school districts they represented varied somewhat.

The sample of 71 PSUs was allocated to the strata in proportion to the numbers of teachers each stratum contained. The selection of PSUs within strata was accomplished by systematic random sampling with probabilities proportionate to size (PPS), with size defined as the total number of teachers in its school district(s). The sample of 71 PSUs drawn in this manner yielded 224 school districts.

Second Stage Sampling: Schools

A total of 1,200 schools was selected from the first-stage sample of school districts. Of the 1,200 schools, 700 were from the public elementary stratum, 100 from the private elementary stratum, and 300 from the public secondary stratum (including middle schools). In addition, 50 Chapter 1 public schools serving limited English proficient students and 50 Chapter 1 public schools serving very high concentrations of low-income students were distributed across elementary and secondary levels. The school districts were ordered by characteristics of importance to ensure adequate representation of these types of districts.

Sampling Frame for Schools. Once a district had been selected, a copy of its most recent Chapter 1 application was obtained from the appropriate State Chapter 1 Office. This provided the basic stratifying information for the school sampling frame, as described in the next section. Stratifying variables included grade span, sources of funding, number of students with limited English proficiency (LEP), and poverty level of school. These data were obtained for all public schools in the district, and for private schools with students who were receiving Chapter 1 services.

Stratification Scheme for Schools. The school sampling frame was stratified by the following characteristics: public/private control; Chapter 1/non-Chapter 1; elementary/middle/secondary; within the public stratum by presence/absence of LEP population and by presence/absence of high degree of poverty; and within the non-Chapter 1 stratum by student population similarity/nonsimilarity to Chapter 1 poverty characteristics.

Allocation of Schools to Strata. The sample of 1,200 schools was allocated to the strata as described below. Because one of the sampled private schools was no longer in operation, the final sample contained 99 rather than 100 private schools. The final

sample, then contained 1,199 schools across 165 school districts. It was not a condition that schools be selected from each of the 224 school districts in the sample.

Eleven hundred public schools were selected: 600 Chapter 1 and 500 non-Chapter 1 schools. Of the 600 public Chapter 1 schools, 50 were selected as schools with particularly high concentrations (>85 percent) of low-income children, and 50 were selected as LEP population schools. The final distribution of Chapter 1 public schools was as follows: 385 Chapter 1 elementary, 100 Chapter 1 middle, and 115 Chapter 1 secondary schools.

The sample of 500 public non-Chapter 1 schools contained 300 schools with poverty populations similar to Chapter 1 schools (200 elementary and 100 middle/secondary schools) and 200 (elementary) schools with nonsimilar populations. Although the non-Chapter 1 sample was not drawn with regard to LEP population, the non-Chapter 1 portion of the sample contained 45 elementary schools with 200 or more LEP students in each.

The 99 sampled private elementary schools were selected from district lists of private schools which, as of the spring of 1985, were projected to contain students who would be receiving Chapter 1 services during the 1985-86 school year. Since a number of changes were made in the way in which Chapter 1 services were provided to non-public school students during the course of this school year, a number of the sample private schools no longer had students receiving Chapter 1 services when the survey took place. For these schools, responses to the principal questionnaire were obtained, but attempts to interview Chapter 1 or regular classroom teachers were not made.

Third Stage Sampling: Respondents

The final stage in selecting the sample for this study involved the stratified random sampling of staff members from within the sampled schools. The principal of each school was selected as a respondent, along with a variable number of teachers. The exact method and sample size for teachers within a school varied according to characteristics of the school.

Sampling Frame for Respondents. Teaching staff lists generated by the schools' principals were used for the random selection of respondents from sampled schools. Teachers were categorized by respondent type as detailed below. Because the sampling design required that a teacher be listed in only one category, an order of priority was

employed, and each teacher was listed in the first category in which she/he qualified. This priority ordering of teachers was as follows:

- Chapter 1;
- State compensatory education;
- Other compensatory or remedial education
- Special services to LEP students
- Services to mildly handicapped students; and
- Regular classroom (a teacher having at least one student receiving services from a teacher in one of the above categories).

Selection of Respondents. Random sampling of respondents from teacher lists was done by the principal of each school and a telephone interviewer. Once the principal had listed the school's teachers according to the above categories, the telephone interviewer provided random numbers for the selection of up to two Chapter 1 teachers (or one Chapter 1 aide if there were no qualifying Chapter 1 teachers) and the selection of one teacher in each of the other existing categories in the given school.

In some school districts, the Chapter 1 district office preferred to supply the names of Chapter 1 teachers providing services in private schools, rather than have this information obtained from the private schools directly. In those cases, Chapter 1 teacher lists were compiled for each sampled private school in the district, and selection of up to two Chapter 1 teachers for each school was done randomly.

Instrument Design and Pretest

Data Collection Modes

The first step in eliciting school cooperation was sending a letter to each school that laid out the plan for sampling and subsequent interviewing. Because the sample required schools to be aware of special teacher definitions, as well as the hierarchical sampling scheme, detailed instructions were sent with the initial mailing. In the interest of time, the strategy was for principals (or the coordinators they designated) to assemble lists of teachers in appropriate categories, and for telephone interviewers to sample teachers from these listings (using random numbers) over the telephone.

Questionnaire Design

A mail questionnaire with the following content areas was developed to collect data from public school principals: a description of Chapter 1 services, a description of the school's regular instructional program, a description of other special programs in the school (compensatory education other than Chapter 1, services for limited-English-proficient (LEP) students, and services for mildly handicapped students), staff characteristics, mechanisms for coordinating services within the school, and a general description of the school. A subset of the same items constituted the private-school version of the principal questionnaire (omitting the descriptions of services other than Chapter 1 and the regular instructional program).

Five teacher questionnaires were developed for interviewing the five categories of teachers who were selected for the study within the sampled schools. Teachers were asked about: the services of the program in which they taught (Chapter 1, other compensatory or remedial education, limited-English-proficient, mildly handicapped, or the regular instructional program); their education, training, and experience; and the coordination of their services with other services in the school.

Data Collection Activities in Support of Sampling

Communication with States

The communication protocol followed for this study included notifying States regarding which districts were sampled as part of the primary sampling units, and notifying districts and States regarding sampled schools.

Notifying States of Selected Districts

At the request of the National Assessment of Chapter 1 Study staff, each State's chief school officer had already appointed a liaison to all of the Chapter 1 studies--most often the State's Chapter 1 Director. The first stage of sampling resulted in a sample of 224 districts in 30 States. Each State liaison was notified of the sampled districts within his/her individual State. At the same time, a copy of the most recent Chapter 1 funding application submitted by each identified districts was requested--for the purpose of identifying the Chapter 1 and non-Chapter 1 schools within each district.

Notifying States and Districts of Selected Schools

The second stage of sampling resulted in a sample of 1,199 schools in 30 States. Each district was notified of the sampled schools in that district; at the same time, each State liaison received a copy of the district notification letter and list of sampled schools for each district in that State.

Communication with Sampled Schools

As soon as the sample of 1,199 schools was drawn, a listing of the sampled schools was sent to the relevant district and to the state Chapter 1 liaison, followed a week later by a letter to the school. The mailout also asked the principal to name a coordinator to help in the teacher sampling and later in scheduling teacher interviews. The letter also provided instructions for compiling the lists of teachers for use in randomly selecting participating teachers (in the subsequent "sampling call").

Data Collection: Interviews of Principals and Teachers

Principals and teachers in 1,199 Chapter 1 and non-Chapter 1 schools nationwide were surveyed during the Spring of 1986. Principals responded to a mail questionnaire, while teacher interviews were conducted over the telephone. A total of 1,145 principal questionnaires were mailed, 1,046 of these to public school principals and 99 to private school principals.

Telephone interviews with the sampled teachers were conducted during April and May 1986. A staff of 30 telephone interviewers was trained to conduct these interviews.

Sample Membership and Response Rates

School Level Participation Rates

The percentage of schools that agreed to participate in the study was as follows: 92.6 percent of the private schools, 97.0 percent of the Chapter 1 public schools, and 90.3 percent of the non-Chapter 1 public schools.

The 1,110 participating schools provided the information necessary for sampling teacher respondents in carefully specified categories, and teachers were sampled in 1,044 of those schools. In the remaining 66 schools, no teachers were eligible for any of the study's teacher categories. Those schools remained in the sample and were

asked to respond to the principal questionnaire; however, no teachers were sampled or interviewed there.

Principal Questionnaire Response Rates

In all, principal questionnaires were mailed to 1,145 schools. A response rate of 87.4 percent was attained overall for the principal questionnaire with individual item response rates consistently above 90 percent. On average, response rates were slightly higher in Chapter 1 schools than in non-Chapter 1 schools.

Teacher Survey Response Rates

Teacher interviews were conducted by telephone with teachers sampled within the six teacher categories. All together, 3,134 teachers were sampled, with an average of three teachers sampled per school. More than 97 percent of the 3,134 sampled teachers responded to the telephone interview with individual item response rates consistently over 95 percent.

Population Estimation Procedures

Estimates of several types, including estimates of totals, percentages, means and medians were made for the National Survey of ECIA Chapter 1 Schools. Estimates of totals were derived from weighted sums of the values reported by responding schools or teachers. Percentages and means were then estimated as the ratios of two estimates of totals. The weights used depended on the probabilities of selection of the schools or teachers and on the rates of response in the strata of the samples.

II. NATIONAL SURVEY OF SCHOOL DISTRICTS RECEIVING ECIA CHAPTER 1: DESIGN AND PROCEDURES

The District Survey was conducted during the Spring of 1986, based on a nationally representative sample of 2,200 local school districts (for the mail survey) and a subsample of 267 of those districts (for the telephone survey). Of the 2,200 districts sampled, 2,161 were currently receiving Chapter 1 funds and were thus eligible to complete the questionnaire. Surveys were completed by local Chapter 1 coordinators or officials in the district who were considered most knowledgeable about the program. The survey results provide nationally representative estimates of district Chapter 1 policies, practices and attitudes as well as of variations along selected dimensions of interest such as district poverty rates.

Sample Design and Weighting Coefficients

Selection of School Districts

The sample of 2,200 public school districts was drawn from a population file created from the 1985 updated version of the Quality Education Data (QED), school district file.

In determining the sample design for the Chapter 1 District Survey, a number of factors were taken into consideration. These were:

- The desire to obtain estimates of reasonable precision for districts falling in different size classifications, as well as for estimates at the national level.
- The desire to incorporate the Orshansky poverty measure criterion into the stratification scheme, in an effort to help secure an adequate representation of those districts at the higher end of the poverty scale.
- The desire to send out approximately 2,000 questionnaires nationwide, understanding that roughly 12 percent of all districts on the sampling frame will be non-Chapter 1 districts.

Based on these considerations, the sampling frame was partitioned into 24 strata, 8 enrollment size classes and 3 classes based on the Orshansky measures of poverty.

The classes were defined as follows:

Enrollment Size Class	Orshansky Poverty Measure Class
25,000 and over	25.0 percent and over
10,000 - 24,999	12 - 24.9 percent
5,000 - 9,999	0 - 11.9 percent
2,500 - 4,999	
1,000 - 2,499	
600 - 999	
300 - 999	
1 - 299	

The enrollment and poverty classes were identical to those employed in a 1981 survey of local program administrators (Advanced Technology, 1983). This was done to facilitate within-class longitudinal comparisons for selected items common to both surveys.

Two thousand two hundred districts were selected from this sample frame. Because a sufficient number of districts from the smallest enrollment classes were desired, the allocation for the six smallest enrollment size classes was assigned proportionate to the square root of the average enrollment size for a district within an

enrollment class (rather than proportionate to the average enrollment size itself). Districts from the two largest enrollment size classes were taken with certainty.

The allocation scheme appears below:

Enrollment Size Class	Population Size	Number to Districts to be Selected
25,000 and over	167	167
10,000 - 24,999	452	452
5,000 - 9,999	957	542
2,500 - 4,999	1,931	386
1,000 - 2,499	3,561	264
600 - 999	1,825	183
300 - 599	2,316	136
1 - 299	3,709	70

Within the three smallest enrollment size classes, the sampling rates were determined so that the desired sample size for enrollment class "i" would be obtained while oversampling poorer districts. Orshansky class "0-11.9 percent" was sampled at rate r_i, Orshansky class 12-24.9 percent was sampled at rate 1.5 r_i, and Orshansky class "25 percent and over" was sampled at rate $2r_i$. In so doing, the sampling variability for national estimates was increased slightly while the number of sampled districts in enrollment class groups "1 to 1,000" within an Orshansky measure of "25 percent or more" was increased by 50 percent (from 62 to 102), thus increasing the likelihood of eligible districts being selected and increasing the precision of estimates based on the higher Orshansky classes. The five largest enrollment classes were sampled with equal probability of selection within a class.

Once the sample was selected, a systematic assignment of questionnaire types was made. Each consecutive grouping of three sampled districts was assigned to receive questionnaire types C, A, and B in that order throughout the list of all sampled districts. Finally, a systematic (equal probability) sample of 267 from the 2,200 sampled districts was selected for participation in the telephone survey associated with the main survey. The mail survey sample districts were arranged in selection order prior to drawing the subsample, thus assuring the representation of original stratification characteristics within the telephone survey districts as well.

Weighting Coefficients

The weights for the full sample are very straightforward. In each enrollment group/poverty group cell a systematic random sample was drawn with each district in

the cell having the same probability of selection. The probability of selection of a district in a cell is simply the number of districts sampled from the cell divided by the number of districts in the cell. The unadjusted weight is the inverse of this number. A nonresponse adjustment based on the number of nonresponding districts in a cell was slight because there was so little nonresponse. No adjustments were made for item nonresponse because individual item response rates were consistently between 85 and 95 percent.

Most data items appear in only two of the three questionnaires because it was felt that the burden on the districts would be too great if all items were asked of all districts. Questionnaire A contains some items that are common to the items on questionnaire B and another set common to questionnaire C. The questionnaires were assigned systematically to the units within a cell, so each questionnaire is a stratified, systematic sample of size one-third of the full sample.

Instrument Design

The mail survey instruments consisted of three versions (A, B, and C) of a questionnaire, containing a total of 79 items. The sample of 2,200 districts was randomly divided into three subsamples, each of which received one version of the questionnaire. Twenty-two of the items appeared on all three versions; the remaining 57 items appeared on two versions each. Thus, each item was contained in at least two, if not three, of the questionnaires; and each questionnaire was received by one-third of the sample.

The topics covered by each questionnaire are listed below:

Version A:

- Background information
- Selecting attendance areas, schools, and students
- Program design
- Program evaluation, assessment of sustained effects, and needs assessment
- General information
- Program management (partial)

Version B:

- Background information

- Selecting attendance areas, schools, and students
- Parental involvement
- Program management
- General information

Version C:

- Background information
- Program design
- Program evaluation, assessment of sustained effects, and needs assessment
- Parental involvement
- Program management
- General information

As noted earlier, a subset of items was replicated from a 1981 survey of local program administrators (Advanced Technology, 1983) to allow for comparisons over time in selected areas of interest.

As an adjunct to the mail questionnaires, a set of "key items" was prepared for each version, for administration by telephone to those districts who were unable or unwilling to respond to the complete mail questionnaire during the data collection period.

Data Collection Procedures and Response Statistics

The survey procedures included letters of notification sent to State and district offices, letters and self-administered mail questionnaires distributed to Chapter 1 Coordinators in sampled districts, postcard reminders, 20 minute key item followup to nonrespondents conducted by telephone, and telephone data retrieval.

Approximately one week before the Chapter 1 District Survey began, letters describing the nature and importance of the study were sent to State Chapter 1 liaisons. This letter included a list of all districts sampled in each liaison's State. Letters were also sent to district superintendents in all selected districts.

Postcard Prompt

Approximately 10 days after the initial mailing, all districts were sent a postcard reminder asking them to complete and return the questionnaire. The postcard provided a toll-free number and the name of the survey operations manager to contact in the event that a questionnaire had not been received by the district. Questionnaires were remailed immediately to all respondents requesting another copy.

Telephone Prompts

Telephone prompt calls were made to all districts that had not responded to the initial mailings. A response rate of 88 percent was achieved. Chapter 1 district coordinators who had not returned questionnaires were contacted to participate in a 20 minute interview of key items appearing on the original questionnaire version for which their district had been selected. These interviews increased the response rate by 11 percent, to 99 percent for key survey items. Of particular importance, key item data were obtained from some very large districts which otherwise would have been lost. Responses were evenly distributed across the three questionnaire versions.

Population Estimation Procedures

Estimates of several types, including estimates of totals, percentages and means were made for the National Survey of School Districts receiving ECIA Chapter 1. Estimates of totals were derived from weighted sums of the values reported by district officials. Percentages and means were then estimated as the ratios of two estimates of totals. The weights depended on probability of selection and on the rates of response in sample strata.

III. A STUDY OF TARGETING PRACTICES USED IN THE CHAPTER 1 PROGRAM (excerpted from the Final Report by C. T. Wood et al.)

The Targeting Study was based on case studies of thirty districts which were selected from throughout the country on the basis of the availability of needed data, district size, urbanicity, and geographic diversity. Using district size and urbanicity as the key classification variables, several sites were selected from each combination to allow for variations in poverty, location and grade level. The size categories and urbanicity definitions were analogous to those used in the District Practices Study.

The number of districts included is as follows:

Size	Urbanicity			
	Urban	Suburban	Rural	Total
Super large	4			4
Large	8	2		10
Medium	2	2	3	7
Small		2	3	5
Very small	—	2	2	4
Total	14	8	8	30

Potential sites were nominated through recommendations by Advisory Panel members, Chapter 1 Technical Assistance Centers, state educational agencies, and directories of school districts and Directors of Research and Evaluation. Telephone interviews were conducted with over 200 potential sites to determine how the necessary data were stored, and to ascertain descriptive information such as the grade levels served by Chapter 1, and the existence of other state compensatory programs. Detailed information was gathered regarding district-wide achievement data, the identification of Chapter 1 participants, and the identification of low-income students.

Based on the telephone interview, the potential sites were ranked as highly desirable, possible, and not adequate. The entire list of sites was examined for geographic representation. Final selections were made to reflect diversity in such characteristics as presence of state compensatory education, participation of private schools, and grades of Chapter 1 participation.

Data were collected from the thirty districts that best fitted the needs of the study in various forms - on magnetic tapes, floppy disks, and paper files. All data were transferred to the IBM-3084 mainframe computer at Stanford University. The transfer required that the data be checked for errors, compared to the documentation, and tested for duplicates. While each district's data were unique, certain information was common to all districts. This information is presented in Table A-1.

Data files for the thirty districts were constructed using the Statistical Analysis System (SAS). This required a review of the documentation provided by each district, examination of the data in their raw form, testing for inconsistencies in the data, and making decisions about what to do with "bad" data. The final list of variables available in each district is included as Table A-2.

TABLE A-1

List of Variables Requested from Each District

I. For each student currently enrolled in grades __ through __:

A. Demographic data
School enrolled for 1985-86
Grade level in 1985-86
Date of birth
Race
Sex
Limited-English-proficient. Use most recent data available. May be dichotomous variable (LEP or not LEP). May be variable with several codes (e.g., 0 = fluent English, 1 = limited English, 2 = Non-English speaker or a score on a language proficiency test).

B. Program participation in 1985-86
Chapter 1 participant. May be dichotomous variable (Chapter 1 participant or not). May be variable with several codes (e.g., 0 = not Chapter 1, 1 = Chapter 1 reading, 2 = Chapter 1 math, etc.) May be a series of dichotomous variables (e.g., participant in Chapter 1 reading program or not, participant in Chapter 1 math program or not, etc.)
Special Education program participant. May be dichotomous variable or coded by type of handicap.
State Compensatory Education Program participant
Bilingual Education Program participant
Migrant Education Program participant

C. Program participation for 1984-85
Chapter 1 participant 1984-85

D. Achievement and poverty status
Standardized test scores. Achievement test scores for spring 1985. NCEs preferred. If not NCEs, national percentile ranks. Separate scores for reading, mathematics, and language arts by subtest (e.g., vocabulary, reading comprehension, etc.) or total battery (e.g., total reading, total math, total language arts).
Poverty status. For 1984-85, participant in National Lunch Program or recipient of AFDC. May be dichotomous or may be more detailed (e.g., 0 = non-participant, 1 = free lunch, 2 = reduced price lunch).

II. For each school in the district:

Chapter 1 school 1985-86 — May be dichotomous variable (0,1)
Chapter 1 school 1984-85 — Chapter 1 (not Chapter 1) or a list of school id codes for those schools with Chapter 1 programs.

Table A-2

Variables in the Data Base by District

Dist	Current* School	Current Grade	Ethnicity	Sex	Age	Current Ch. 1	Breakdowns	Last Yr. Ch. 1	Breakdowns	Current Spec. Ed.	Breakdowns	Current LEP	Breakdowns	Current State Comp. Ed.	Breakdowns	Current** Standardized Test Scores Rdg.	Math	LA	Other	Retain	Move	FRL by Student	Other
A2	X	X				X	reason not in, full or part	X	reason not in, full or part	X	setting			NA		X	X	X					
C5	X	X	X	X	X	X		X		X	LD, EH not all	X		NA		X	X	X	X			X	
E1	X	X		X	X	X	intensity	X	intensity	X	setting	X		NA		X	X	X		X	X		
H2	X	X	X	X	X	X	R,M,L	X	R,M,L	X				NA		X	X	X					
J3	NA	X		X	X	X				X				NA		X	X	X				X	
P1	NA	X	X	X	X	X	R,M	X	R,M	X	some HCD			NA		X	X	X				X	
S5	X	X	X	X	X	X	R,M	X		X	SPH or LD	X	prt. lang.	NA		X	X			X		X	
U1	X	X	X	X	X	X	dist only has R program	X	dist only has R program	X	dummy	X	dummy for bil. pgrm.	X		X	X	X	X	X		X	stu. conduct files available
X0	X	X	X	X	X	X	dummy			X	dummy	X	dummy			X	X	X	X	X			
X5	1986 School	X	X	X	X		(unusable)	X	R,M,B		(unusable)	X	LEP and bil. pgrm. dummies	NA		Spr 84						X	1986
Z1	X	X	X	X	X	X	R,M	X	R,M,B	X	type of hcap			X	dummy	X	X			X		X	
Z2	X	X		X		X	dummy			X	SC or resource room	X	dummy	X	dummy	X	X	X	X	X		X	gifted
B4	X	X	X	X	X	X	R,M	X	R,M,B	X	type of hcap			NA		X	X	X	X	X		X	teacher rating for R & M
D3	X	X	X	X	X	X	R,M	X	R,M,B	X	type of hcap			NA		X	X	X	X	X		X	
G3	X	X	X	X	X	X	R,M	X	R,M,B	X	type of service												
I2		X	X	X	X			X	R,M,B	X	dummy			X	R,M,B	X	X	X	X	X		X	gifted
M2	X	X	X	X	X	X	R,M,BASIC,ECI	X	dummy	X	service received	X	dummy	NA		X	X	X	X	X		X	attendance, teacher rating
O2	X	X	X	X	X	X								NA						X		X3	tchr. CMI tchr rating; composite rating score
S2	X	X	X	X	X	X	R,M	X	dummy	X	type of srv.	X	prt. lang.	X	dummy	X	X	X	X	X		X	gifted
T2	X	X	X	X	X	X	R,M	X	R,M,B	X	type of hcap	X	LEP and bil. pgrm.	X	R,M,B	X	X	X		X		X	migrant
U2	X	X	X	X	X	X	dummy			X	dummy	X	ESL dummy	NA		X	X	X	X				
V3	X	X	X	X	X	X	detailed, incl. R,M	X	R,M	X	type of hcap	X	LEP and bil. pgrm.	NA		X	X	X	X			X	
W3	X	X	X	X	X	X	R,M,Bil,ESL	X	R,M,bil.,ESL	X	type of srv. type of HCAP	X	LEP and bil. pgrm.	X	R,M	X	X	X				X	attendance
Y2	X	X	X	X	X	X	dummy	X	dummy					X	dummy	X	X						
Z3	X	X	X	X	X	X	dummy R,M,L			X	type of HCAP	X	ESL pgrm.	NA		X	X						
										X	type of HCAP	X	low score, bil. pgrm., prt. lang.	NA		X	X	X					
E5		X	X	X		X	dist only has R program							NA		X	X	X	X			X	
H3		X	X	X	X	X	R,M	X	R,M	X	type of HCAP			NA		X	X	X	X				
J4	A	X	X	X	X	X	R,M	X	R,M	X	dummy			NA								X	teacher rating R,M selection score
J5		X	X	X	X	X	R,M	X	R,M	NA		NA		X		X	X	X		X		X	
										X	type of HCAP	X		NA		X	X	X	X			X	
																X	X	X				X	indian ed prgm., migrant

*For districts, the "current" year is 1983-84, and "last" year is 1982-83. For districts D2 and G1, "current" is 1984-85, and "last" is 1983-84 used for "current" year Chapter 1 selection.

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METHODS USED FOR SAMPLING ERROR CALCULATION

Estimating Sampling Errors for Survey Estimates

The calculation of sampling errors of survey estimates involved two steps. First, standard errors were computed under the assumption of simple random sampling. Next, each standard error was multiplied by a design effect factor. Average design effects for estimates from the School Survey were calculated from sampling errors based on a modified balanced repeated replication method completed by Westat, Inc. for the National Survey of ECIA Chapter 1 Schools. For estimates of proportions from teacher questionnaires a design effect of 1.37 was used; a design effect factor of 1.21 was used for estimates of proportions from the principal questionnaire.

Westat, Inc. also conducted an extensive examination of design effect factors for estimates of proportions and means for the National Survey of ECIA Chapter 1 Districts. A design effect factors is 2.3 was applied to estimate proportions presented for the overall population; for estimates of means a conservative average factor of 2.7 was used.

Estimating the Variance of a Sample Median

Variances for sample medians were computed using Woodruffs' method. The formula is as follows: let x_m be the sample median of the variable x for some group A. Define r_L=proportion of group A with a value of x less than or equal to x_m and r_U=proportion of group A with a value of x greater than or equal to x_m. Using results from the modified BRR conducted by Westat, Inc.; the standard errors s_L and s_U of r_L and r_U were estimated. They were then averaged to get $s=(s_L + s_U)/2$. Let $q_L=.5-s$ and $q_U=.5+s$. By interpolation, x_L and x_U were found such that

$P(x < x_L) = q_L$ or smaller,

$P(x > x_U) = 1 - q_U$ or smaller,

$P(x < x_U) = q_U$ or smaller, and

$P(x > x_U) = 1 - q_U$ or smaller.

The estimated standard error of x_m is then $(s_U - x_L)/2$.

Since Woodruff's method assumes that the variable being examined is continuous, or nearly so, the theoretical basis is undermined in those cases where there are ties in the distribution (i.e., multiple occurrence of the same value).

APPENDIX B

SUPPORT TABLES FOR FIGURES AND TABLES

SUPPORT TABLE FOR FIGURE 1

Programs for LM/LEP Students Offered by Chapter 1 and Non-Chapter 1 Public Elementary Schools

Students and Programs	Percent of Schools	N	Standard Error
Chapter 1	76	682	2.0
Chapter 1 Schools with LM/LEP Students	33	364	3.0
Non-Chapter 1 Schools with LM/LEP Students	45	318	3.4
Of Chapter 1 Schools with LM/LEP Students, Percent with Special LM/LEP Programs	73	157	4.3
Of Chapter 1 Schools with Chapter 1 ESL Programs	32	157	4.5
Of Chapter 1 Schools with LM/LEP Students, Percent with Both Chapter 1 ESL and Special LM/LEP Programs	22	157	4.0
Of Non-Chapter 1 Schools with LM/LEP Students, Percent with Special LM/LEP Programs	74	174	4.0

Table values are based on weighted data.

Source: School Survey conducted for the Chapter 1 National Assessment, 1985-86.

SUPPORT TABLE FOR FIGURE 2

Percentages of Elementary Schools Offering Special LM/LEP, Chapter 1, and Chapter 1 ESL Programs, by Poverty

Program	Poverty Quartile	Percent of Schools	Standard Error
Special LM/LEP	1st	25	3.2
	2nd	19	2.9
	3rd	23	3.1
	4th	33	3.5
Chapter 1	1st	20	2.5
	2nd	24	2.8
	3rd	31	3.0
	4th	25	2.8
Chapter 1 ESL	1st	13	4.9
	2nd	11	4.6
	3rd	31	6.7
	4th	45	7.2

N = 268 (sample of schools with special LM/LEP services), 357 (sample of schools with Chapter 1), 69 (sample of schools with Chapter 1 ESL services).

Table values are based on weighted data.

Source: Survey of Schools conducted for the Chapter 1 National Assessment, 1985-86.

SUPPORT TABLE FOR FIGURE 3

Student-Staff Ratios in Chapter 1 and Special LM/LEP Programs, by Subject

Program	Subject	Median Student-Staff Ratio	N	Standard Error
Chapter 1				
	Reading	3	457	.1
	Math	4	270	.45
	ESL	4	51	2.8
Special LM/LEP				
	Reading	5	127	.85
	Math	7	111	1.8
	ESL	5	175	.89

Table values are based on weighted data.

Source: Survey of Schools conducted for the Chapter 1 National Assessment, 1985-86.

SUPPORT TABLE FOR FIGURE 4

Minutes Per Day of Instruction in Chapter 1, Chapter 1 ESL, and Special LM/LEP Programs

Program	Minutes	Frequency	Standard Error
Chapter 1	1 - 60	75	2.3
	61 - 120	5	1.1
	121 - 180	7	1.4
	181 - 240	3	0.9
	241 - 300	6	1.3
	301+	4	1.0
Chapter 1 ESL	1 - 60	53	8.4
	61 - 120	6	3.8
	121 - 180	11	5.2
	181 - 240	7	7.9
	241 - 300	6	4.0
	301+	18	6.5
Special LM/LEP	1 - 60	34	4.6
	61 - 120	14	3.4
	121 - 180	5	2.2
	181 - 240	7	2.5
	241 - 300	10	2.9
	301+	30	4.5

Table values are based on weighted data.

N = 670 (sample of Chapter 1 teachers), 66 (sample of Chapter 1 ESL teachers), 197 (sample of special LM/LEP teachers).

Source: Survey of Schools conducted for the Chapter 1 National Assessment, 1985-86.

SUPPORT TABLE FOR FIGURE 8

Specialist Credentials for Special LM/LEP, Chapter 1, and Chapter 1 ESL Public Elementary School Teachers

Program	Credential	Percent of Teachers	Standard Error
Chapter 1			
	Reading	69	3.4
	Bilingual ED	1	0.7
	ESL	1	0.7
Chapter 1 ESL			
	Reading	28	8.6
	Bilingual ED	10	5.7
	ESL	4	3.7
Special LM/LEP			
	Reading	6	2.4
	Bilingual ED	72	4.4
	ESL	25	4.3

N = 343 (sample of Chapter 1 teachers), 52 (sample of Chapter 1 ESL teachers), 197 (sample of special LM/LEP teachers).

Table values are based on weighted data.

Source: Survey of Schools conducted for the Chapter 1 National Assessment, 1985-86.

SUPPORT TABLE FOR EXHIBIT 6

Staff Configurations in Special LM/LEP and Chapter 1 Programs

Program	Staff Configuration	Percent of Schools	Standard Error
Chapter 1 Reading			
	Special Aide, No Teacher	8	1.9
	Regular Teacher, Special Aide	19	2.8
	Special Teacher, Aide	61	3.2
	Special Teacher, No Aide	37	3.2
Chapter 1 ESL			
	Special Aide, No Teacher	4	2.9
	Regular Teacher, Special Aide	23	8.1
	Special Teacher, Aide	50	8.8
	Special Teacher, No Aide	43	7.2
Special LM/LEP ESL			
	Special Aide, No Teacher	3	2.6
	Regular Teacher, Special Aide	19	8.2
	Special Teacher, Aide	59	2.6
	Special Teacher, No Aide	39	8.7

N = 383 (sample of Chapter 1 elementary schools that offer Chapter 1 reading), 73 (sample of elementary schools that offer Chapter 1 ESL), 138 (sample of schools with special LM/LEP ESL services).

Table values are based on weighted data.

Source: Survey of Schools conducted for the Chapter 1 National Assessment, 1992-93.

SUPPORT TABLE FOR TABLE 3

Uses of Teacher Judgment in Determining Student Eligibility for Chapter 1

Teacher Judgment Used For:	Percentage of School Districts	Standard Error
Midyear Transfers and Special Circumstances	58%	2.3
Nominating Students for Testing	49	2.2
Deciding Not To Serve Students Below the Cutoff	47	2.3
Deciding to Serve Students Above the Cutoff	44	2.3

N = 1115 (sample of school districts). Table values are based on weighted data.

Source: District Survey

SUPPORT TABLE FOR TABLE 4

Reading Achievement Scores and English Language Proficiency Levels for Students Receiving Chapter 1 Reading Services or Special Services for LM/LEP Students, Grades 2-6, in Three School Districts

Mean Reading Achievement Normal Curve Equivalent Scores*
(Standard Deviation/Number of Students)

School District	Programs: No Program	Chapter 1 Only	Special Language Only	Both Chapter 1 and Language
O1	55 (19/10841)	24 (10/1609)	34 (18/149)	21 (10/29)
R1	57 (16/8869)	32 (10/616)	45 (21/410)	28 (11/31)
M1	63 (14/1394)	40 (11/649)	54 (8/80)	33 (12/984)

Median English Language Proficiency Level**
(Interquartile Range/Number of Students)

School District	No Program	Chapter 1 Only	Special Language Only	Both Chapter 1 and Language
O1	5 (5-5/13659)	5 (5-5/1690)	1 (1-2/297)	2 (1-3/30)
R1	5 (5-5/8876)	5 (5-5/617)	2 (1-3/317)	3 (3-3/29)
M1	5 (5-5/1568)	5 (5-5/726)	2 (1-3/119)	2 (1-3/1205)

* Mean NCE scores are from standardized achievement tests results averaged across grades and students indicated.

** (1) non-English speaker, (2) little English speaker, (3) average English speaker, (4) near fluent English, (5) fluent English speaker; median scores are represented.

SUPPORT TABLE FOR TABLE 5

Median Minutes Per Day of Chapter 1, Chapter 1 ESL, and Special LM/LEP Instruction

Program	Median Minutes/Day	Interquartile Range	Standard Error
Chapter 1	35	30 - 50	2.7
Chapter 1 ESL	60	45 - 300	72.1
Special LM/LEP	205	60 - 330	91.8

N = 502 (sample of Chapter 1 teachers), 52 (sample of Chapter 1 ESL teachers), 197 (sample of special LM/LEP teachers).

Source: Survey of Schools conducted for the Chapter 1 National Assessment, 1985-86.

SUPPORT TABLE FOR TABLE 6

Percentage of Chapter 1 and Special LM/LEP Public Elementary School Teachers Using Languages Other Than English, by Subject

	Percent of Chapter 1 Teachers with LM/LEP Students Using Other Than English	Standard Error	Percent of Special LM/LEP Teachers Using Other Than English	Standard Error
Reading	33	9.0	78	4.0
Mathematics	50	9.6	83	3.4
ESL	41	9.4	41	4.8

N = 933 (sample of Chapter 1 teachers), 51 (sample of Chapter 1 ESL teachers), 197 (sample of special LM/LEP teachers).

Source: Survey of School conducted for the Chapter 1 National Assessment, 1985-86.

Table reads: Of Chapter 1 reading teachers with LM/LEP students, 33 percent use other than English in instruction.

* ESL teachers were not asked about the presence of LM/LEP students in

SUPPORT TABLE FOR TABLE 7

Use of Languages Other Than English for Instruction,
by Percentage of LM/LEP Students Enrolled in the School

Percentage of Schools Using Non-English for Instruction

Percent of LM/LEP Students Enrolled	Reading	Standard Error	Math	Standard Error	Language Arts	Standard Error
Lowest One-Third	19	2.6	14	2.3	25	2.9
Middle One-Third	30	3.0	29	3.0	27	3.0
Highest One-Third	58	3.3	60	3.3	62	3.2

N = 331

Source: Survey of Schools conducted for the Chapter 1 National Assessment, 1985-86.

Standard Errors for Text Citations

The following are standard errors for text citations that do not appear in tables in the report.

Page	Descriptor	Estimate	Standard Error
Chapter 2			
12	National estimate of the number of LM/LEP students in grades K-12	1,387,082	374,318
12	National estimate of number of students receiving Chapter 1 ESL	530,000	44,918
13	Percentage of districts with LM/LEP students	33.5	.01
13	Percentage of public elementary schools with LM/LEPs	36	3.0
13	Median percentage of LM/LEP students in public elementary schools with any LM/LEPs	2	.8
13	Median percentage of LM/LEP students in districts with any LM/LEP students	2	.21
17	Percentage of public elementary schools with Chapter 1 ESL services located in urban areas	33	7.1
17	Percentage of public elementary schools with Chapter 1 ESL services located in suburban areas	34	7.1
17	Percentage of public elementary schools with Chapter 1 ESL services located in rural areas	33	7.1
17	Percentage of public elementary schools located in urban settings	18	1.7
17	Percentage of public elementary schools with special LM/LEP services located in urban areas	34	3.5

Page	Descriptor	Estimate	Standard Error
17	Percentage of public elementary schools with special LM/LEP services located in suburban areas	47	3.7
17	Percentage of public elementary schools with special LM/LEP services located in rural areas	19	2.9
17	Percentage of public elementary schools located in suburban areas	36	2.1
19	Percentage of public elementary schools with less than 10 percent LM/LEP students that offer special LM/LEP services	22	2.1
19	Percentage of public elementary schools with over 25 percent LM/LEP students that offer special LM/LEP services	94	3.8
19	Median percentage of LM/LEP students enrolled in public elementary schools with special LM/LEP services	3	1.4
19	Median percentage of LM/LEP students in public elementary schools with both Chapter 1 ESL and special LM/LEP services	9	3.6
19	Median enrollment in public elementary schools with both Chapter 1 ESL and special LM/LEP programs	500	80.2
19	Percentage of public elementary schools with both Chapter 1 ESL and special LM/LEP services that are located in urban areas	45	8.7
19	Percentage of public elementary schools with both Chapter 1 ESL and special LM/LEP services that are locates in suburban areas	36	8.4
19	Percentage of public elementary schools with both Chapter 1 ESL and special LM/LEP services that are located in rural areas	19	6.9

Page	Descriptor	Estimate	Standard Error
20	Percentage of public elementary schools with both Chapter 1 ESL and special LM/LEP services in the first poverty quartile	5	3.7
20	Percentage of public elementary schools with both Chapter 1 ESL and special LM/LEP services in the second poverty quartile	13	5.6
20	Percentage of public elementary schools with both Chapter 1 ESL and special LM/LEP services in the third poverty quartile	28	7.5
20	Percentage of public elementary schools with both Chapter 1 ESL and special LM/LEP services in the fourth poverty quartile	53	8.4
20	Median percentage of LM/LEP students in public elementary schools with LM/LEP students and no language program	1	.68
20	Median enrollment in public elementary schools with LM/LEP students and no language program	395	94.7
20	Percentage of public elementary schools with LM/LEP students and no language program located in urban settings	35	12.3
20	Percentage of public elementary schools with LM/LEP students and no language program located in surburban settings	28	11.6
20	Percentage of public elementary schools with LM/LEP students and no language program located in rural settings	37	12.4
20	Percentage of public elementary schools with LM/LEP students and no language program in first poverty quartile	6	6.0
20	Percentage of public elementary schools with LM/LEP students and no language program in second poverty quartile	43	12.5

Page	Descriptor	Estimate	Standard Error
20	Percentage of public elementary schools with LM/LEP students and no language program in third poverty quartile	25	10.9
20	Percentage of public elementary schools with LM/LEP students and no language program in fourth poverty quartile	26	11.1
Chapter 3			
26	Percentage of Chapter 1 public elementary schools using English language proficiency tests for Chapter 1 student selection	22	2.7
27	Percentage of special LM/LEP teachers using English language proficiency tests for special LM/LEP student selection	91	2.8
28	Percentage of Chapter 1 public elementary schools with LM/LEP students using English language proficiency tests for Chapter 1 student selection	30	4.6
28	Percentage of districts using teacher judgment in Chapter 1 student selection	90	1.4
Chapter 4			
40	Of Chapter 1 public elementary school teachers, percent teaching Chapter 1 in a pull-out setting	69	2.4
40	Of Chapter 1 public elementary school teachers, percent teaching Chapter 1 in an in-class setting	14	1.8
42	Of special LM/LEP public elementary school teachers, percent teaching special LM/LEP classes in a replacement setting	67	4.6
42	Of Chapter 1 ESL public elementary school teachers, percent teaching Chapter 1 ESL in an in-class setting	42	8.3

Page	Descriptor	Estimate	Standard Error
42	Of Chapter 1 ESL public elementary school teachers, percent teaching Chapter 1 ESL in a replacement setting	39	8.2
42	Median years of experience for Chapter 1 ESL teachers in public elementary schools	10	1.5
42	Median years of experience for Chapter 1 teachers in public elementary schools	13	1.4
42	Median years of experience for special LM/LEP teachers in public elementary schools	9	1.4
43	Percentage of Chapter 1 teachers in public elementary schools with a bachelors degree as their highest level of academic achievement	21	3.3
43	Percentage of Chapter 1 teachers in public elementary schools with education beyond a bachelors degree but less than a masters degree	29	2.5
43	Percentage of Chapter 1 teachers in public elementary schools with a masters degree as their highest level of academic achievement	36	2.8
43	Percentage of Chapter 1 teachers in public elementary schools with education beyond a masters degree but less than a PhD	14	2.6
43	Percentage of Chapter 1 ESL teachers in public elementary schools with a bachelors degree as their highest level of academic achievement	13	6.7
43	Percentage of Chapter 1 ESL teachers in public elementary schools with education beyond a bachelors degree but less than a masters degree	58	9.9
43	Percentage of Chapter 1 ESL teachers in public elementary schools with a masters degree as their highest level of academic achievement	24	8.5

Page	Descriptor	Estimate	Standard Error
43	Percentage of Chapter 1 ESL teachers in public elementary schools with education beyond a masters degree but less than a PhD	4	3.9
43	Percentage of special LM/LEP teachers in public elementary schools with a bachelors degree as their highest level of academic achievement	20	3.9
43	Percentage of special LM/LEP teachers in public elementary schools with education beyond a bachelors degree but less than a masters degree	35	4.7
43	Percentage of special LM/LEP teachers in public elementary schools with a masters degree as their highest level of academic achievement	25	4.2
43	Percentage of special LM/LEP teachers in public elementary schools with education beyond a masters degree but less than a PhD	18	3.8
46	Percentage of Chapter 1 ESL teachers in public elementary schools who report using aides to assist them	75	8.7
46	Percentage of special LM/LEP teachers in public elementary schools who report using aides to assist them	66	4.6
46	Percentage of Chapter 1 teachers in public elementary schools who report using aides to assist them	51	2.8